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"When Growth Stops, Decay Sets In"

FEELINGS of both pride and shame were aroused in us as we listened to the address of Dr. Charles H. Herty at the meeting of the U. S. Institute for Textile Research.

We were proud of being associated with an industry which has produced a group of men who are fighting against long odds to translate the research ideals of the Institute into accomplishment. We are proud of the textile men who, as directors of the Textile Foundation, are giving so much of their time and energy to the same general mission. We are proud of the memory of men like the late A. M. Patterson who, as Dr. Herty said, had the vision of research years ago and fought to prevent the dissipation of a fund which was destined for its support. We are proud of the textile companies which are carrying on their own research programs.

We are ashamed however when we consider the difficulty of extracting as little as $100 a year apiece, for technical research, from great textile manufacturing organizations. We are ashamed when we hear of accomplishments of *cooperative* research in the petroleum, steel and paper fields—and compare them with the almost negligible results to date in our field.

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This shame, nevertheless, is mitigated by understanding. We do not believe the average textile manufacturer has ever become convinced of the need for such coordinated activity in his industry.

We believe, equally forcefully, that such conviction must come—and speedily.

In the Institute and in the Foundation are men who are fighting, not necessarily for any one plan of procedure, but for realization of at least an approach toward fundamental investigation of textile technique. Not all the methods suggested to date will appeal to any one man; not all of them appeal to us. But the ultimate goal should—and must—appeal.

Great as is the present economic pressure, and its demands upon the time and funds of every company, it cannot postpone action on this vital phase. On the contrary, it should hasten action, if we are not to go backward, as Dr. Herty warned.

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No one is more sorry than are we, that Dr. Herty does not feel he can accept the presidency of the U. S. Institute. Our contacts with him, dating back over a period of years to those seemingly remote days when he was fighting so hard for the very existence of the American dye industry, have convinced us that he possesses that unusual combination of a scientific mind and an ability to convey the implications of science to the layman. Having almost an evangelistic belief in research, he also can infect others with his belief.

Although we understand the personal pressure under which he is working at present, and the importance of the development he is undertaking in the South, we still hope that he may see his way clear to lead this movement.

But whether Dr. Herty becomes officially a worker, or merely continues to serve his textile friends unofficially, he has brought a message to the industry which it cannot afford to ignore.

When growth stops, decay sets in, he said . . . There is no room in the future economic picture for a decaying industry.

The Week in Textiles

as Reflected in This Issue

General

Jacquard Gauze Fabrics

The freedom of design offered in the construction of jacquard gauze fabrics has lent interest to this type of work, and some very attractive fabrics have been produced. The development of watered effects on a gauze base is one of the interesting features of this type of fabric. *(page 34)*

Swope Asks Experimentation

The best chance for getting something out of the Swope Plan is through actual experimentation with it, according to Gerard Swope himself. In a rebuttal to critics of the plan he suggests means whereby the plan could be tested in operation. *(page 43)*

Interior Periscope

Announcement of a novel device for examining the interior of drums, barrels, cylinders, etc., holds considerable interest to the textile man. *(page 49)*

Cleaning Monel Metal

Monel metal equipment should present no problems in regard to cleaning. If, however, the surface becomes covered with a film of grease, a boil-out using soap and alkali will completely remove it. *(page 51)*

Cotton

Merino Yarn Manufacture

Most of the difficulties encountered in the manufacture of merino yarn on the cotton system arise in the processes of picking and carding. General information on this subject which should be of aid to a cotton manufacturer entering this field is supplied. *(page 50)*

Defect in Sewing Thread

Uneven tension in the strands during the twisting operation is determined as the cause of the formation of intermittent loops by one of the doubling yarns. *(page 51)*

Wool Trade Initiative

At the annual meeting of the Boston Wool Trade Association, words were not minced regarding the alleged damage which the Federal Farm Board's operations have done to the wool trade. Dealers are planning to remain in business, however, and will try to carry forward the promotional work started by National Wool Week. R. W. Turnbull was elected president. *(page 42)*

Yarns Are Weaker

The decline in raw cotton has left the spinner without much support in his effort to get full prices on yarns. This week the only method of selling seemed to be price-cutting and such small orders as were placed were taken at exceptionally low figures. *(page 57)*

Cotton Is Slipping

The raw material has moved into a gradually declining market as speculative support dwindled. The rise of two weeks ago was premised chiefly on the strength of all commodities and the fact that cotton consumers failed to support the new levels has resulted in the current recession. *(page 57)*

Gray Goods Demoralized

After a brief spurt late last week gray goods became inactive and prices this week were decidedly soft. Selling at present bottom figures means a loss of 3 or 4c. a lb. to mills according to a Worth Street authority, and further efforts toward curtailment are being made to prevent further demoralization. *(page 61)*

Wool

Scouring Quarter-Blood Wool

A discussion of the economic phase of quarter-blood wool scouring reveals the fact that a yield of 42 to 50% of the grease wool is a fair return on the basis of English-system, single-combed stock. *(page 50)*

Yarns Neglected

Buyers of worsted yarns seem determined to withhold from the market as long as possible and selling houses report almost complete stagnation this week. *(page 57)*

Raw Wool Steadier?

The slightly easier trend in the raw material noted in recent week has crystalized into lower prices on some sorts. The movement has been so gradual that there has been little evidence of real weakness. Perhaps stabilization has been achieved. *(page 59)*

Optimism in Wool Goods

More optimism is noted in wool goods as the result of National Wool Week. Women's wear fabrics seem likely to benefit more than other lines. *(page 61)*

Knitting

Christmas Is Coming!

Hosiery buyers seem suddenly to have become aware that Christmas is coming and to have started covering on hosiery for their holiday trade. *(page 62)*

Spring Underwear Starts

Buyers are gradually placing initial orders for spring underwear and this week did active buying. *(page 62)*

The Textile Outlook

AT THE present time the textile industry seems to be toying with the destructive practice of opening up its old wounds and prodding its half-healed sores. Convalescence was well under way until textile sellers began to put the knife into prices. Now the patient bids fair again to be a hospital case unless common sense can take hold and put an end to this self-mutilation. From both the woolen and the cotton branches this week come reports that there is little prospect of broader buying until prices attain some measure of stability. That silks and knit goods are not mentioned in the same breath is due perhaps chiefly to the fact that they are in different parts of the cycle. It has become an old story but remains true that total movement of goods over a period of time is not increased by cut-throat practices. One concern merely takes orders away from another and buys this achievement with a loss on every yard delivered. Both sides lose; one is starved for lack of business, the other for absence of profits. Holding firm to figures which include a decent margin for profit would bring a more equitable distribution of business among the industry's producing units, and, though many might book lower totals, they would have at the end of the year funds for distribution to stockholders and for more substantial wages for employees.

Open Spring Sweaters

Winter-weight goods for immediate delivery are the present leaders in knitted outerwear. Openings of spring 1932 sweaters are under way at prices to 12% below last season. *(page 62)*

Silk

Silk Institute

"Silk Industry Week" opened on Nov. 14 at Paterson, N. J., with an interesting and stimulating group of talks listed under the title "Silk Institute." Authorities on various subjects bearing on the silk industry addressed a large and representative audience. *(page 24)*

Paterson Machinery Exhibit

Review of the silk and rayon machinery exposition held at Paterson during the last week reveals the fact that equipment manufacturers are maintaining a progressive attitude. New machines are given special emphasis. *(page 26)*

Silk Convention

At mid-week in Paterson was held a silk trade convention at which representative speakers brought before their audience authoritative comment on matters of prime importance. *(page 30)*

War Clouds

The silk industry is closely watching the Chinese-Japanese crisis in Manchuria. Some important silk districts are located in the fighting zone. Financing of silk industry both in Japan and China might easily be affected. *(page 32)*

No Silk Rise Likely

In view of the weaker statistical position, silk prices can hardly show any sustained rise, says Dr. L. H. Haney in this week's TEXTILE WORLD Analyst. He believes that further moderate recessions are probable. War or no war he expects that the Japanese yen is likely to decline and such a change would certainly bring lower dollar prices on silk. *(page 53)*

To Supply Needed Cotton Data

BOTH cotton growers and manufacturers will rejoice at the announcement that the U. S. Department of Agriculture will issue regular annual reports showing the grade and staple of cotton used by American mills. In replying to a resolution to that effect adopted by the National Association of Cotton Manufacturers at its annual meeting last month, the Department states that "information concerning the qualities of cotton required by the manufacturers of the country is of value to agriculture and the entire cotton industry," and adds that it is a purpose of the Department to issue reports of the quality consumed such as the association requested.

It is further stated that the suspension of the report in the last two seasons was due to difficulty experienced in reconciling the data secured, with other data relating to crops and carryover. "Diligent searches," states the Department, "are being made for the source of the present disparities to the end that the publication of consumption data may be resumed and the figures for crop and carry-over issued in final form."

In urging this step a year ago, and in supporting the National Association's stand last month, TEXTILE WORLD was influenced by the conviction that such data, published regularly and promptly, are of utmost importance to growers in enabling them to produce, with profit, the types most needed, and to mills, in assuring them an adequate supply for their requirements. It is to be hoped that the disparities will be reconciled shortly, and that this service to agriculture and industry will be placed upon a regular basis. The Department of Agriculture is to be congratulated on its prompt and affirmative answers to the N.A.C.M. resolution.—*Editor.*

Price Outlook Clouded

Raw silk buying outlook, and there are disturbing elements such as the growing tendency among mills to re-sell silk stocks at low prices. Firmness in Japan has provided the backbone. *(page 59)*

Spun Silk Hopeful

Silk spinners regard spring prospects as more favorable. Already an upswing has been noted. Throwsters continue to rely mostly on the hosiery trade as broadsilk weavers wait. *(page 59)*

Sampling Spring Silks

Active sampling of new spring lines by the cutting-up trade is current in the broadsilk market. Prints will still be important but plains will undoubtedly be more widely used. *(page 61)*

Rayon

Niggerheads in Hosiery

The development of black spots or "niggerheads" in rayon hose is the result of improper boiling off or washing. The various causes of this defect are outlined and a means for preventing it suggested. *(page 51)*

Silk Mills Seek Rayon

Interest on the part of broadsilk mills has increased the movement of rayon recently. Call is mainly for 100s and 150s and spot delivery is wanted. Users show a disposition to forget the price issue and regard current levels are reasonably stable. *(page 59)*

Processing

Dry Cleaning in Textile Industry

Recent improvements in equipment used for dry cleaning fabrics permits the use of this system in textile plants. That dry cleaning gives more satisfactory results than washing and that the former method permits the recovery of valuable oil are factors which should be kept in mind. *(page 37)*

Dyeing of Cotton-Rayon Goods

Rayon, being a modified cellulose, possesses a greater affinity for substantive dyestuffs than does cotton. With deep shades, especially, the rayon will take most of the dyestuff. *(page 51)*

Oil in Exhaust and Process Steam

Lubricating oil in appreciable amounts in exhaust steam being used for processing, is liable to have a damaging effect upon goods being treated. Different ways in which oil may act as a detriment are discussed. *(page 38)*

The Business Outlook

EASING of banking strain from both internal and external sources is still the outstanding symptom of underlying improvement in the domestic situation. Prospects of speedy attack on the reparations and private debt problems of Germany are promising in the European picture. Surface signs of actual improvement in activity are still confined to the somewhat mysterious out-of-season steadiness in raw steel production, despite slackness in structural and railroad requirements and delay in new-model automotive specifications. All other current indications of industrial and trade activity continue to show more than seasonal weakness, depressing our index to lower levels for the first half of November and making it uncertain whether the month as a whole will supply the first faint sign of stabilization or upturn from the October low point which sentiment expects. Continued liquidation of bank credit, renewed weakness in security and commodity markets and high commercial mortality records are indications of the difficulties and irregularities of adjustment inevitable at the end of a prolonged and drastic deflation. It is to be expected that these difficulties will be intensified in the closing weeks of the year and until the usual spring up-swing supplies new stimulus to business.

—The Business Week.

Exposition and Institute Open

"Silk Week" in Paterson

PATERSON, the silk city of New Jersey, came back temporarily into its old-time leadership of the silk industry, this week, on the occasion of "Silk Industry Week," which opened with a bang last Saturday and has continued through the current week, concluding today (Nov. 21). The numerous events included talks by experts on virtually every outstanding problem of the industry; much original thought and many constructive ideas on how to meet these problems were aired, and it was in truth a week of self-searching and self-analysis for the industry as a whole. The Silk Machinery Exposition which opened Saturday evening at the Paterson Armory, was the star event, and it drew large crowds of trade representatives daily. Since "Silk Industry Week" was promulgated by the Chamber of Commerce of Paterson, in cooperation with the silk trade, the opening of the silk show naturally took on the aspect of a big civic event for Paterson. The technical aspects of the machinery display are covered in detail elsewhere in this issue; this event constituted a comprehensive picture of silk machinery development during recent years.

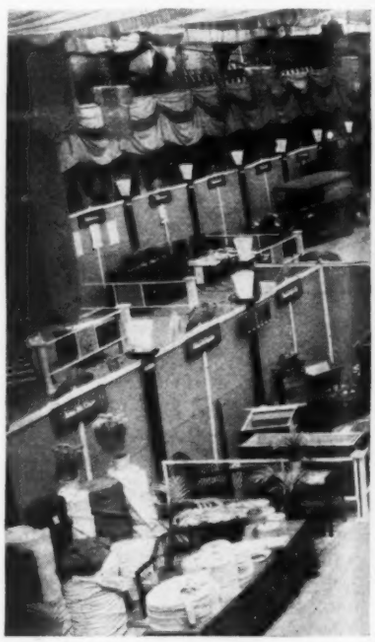
A fashion show, in which numerous stage favorites participated and which highlighted the importance of silk in current styles, was a feature of the Silk Machinery exhibition and was repeated daily at the armory.

The other chief events of the week were the Silk Institute meeting Saturday (Nov. 14), the National Silk Convention, Wednesday and Thursday (Nov. 18 and 19) and the Silk Travelers' Association dinner-meeting, (Nov. 19), all of which were held at the Alexander Hamilton Hotel. The Institute meeting comprised addresses by a score of authorities on such questions as "Cost Accounting for Textiles," commercial arbitration, research, factoring, credits, stability of employment, obsolescence and waste disposal.

At the general Institute session in the morning, which was opened by James Wilson, president, Paterson Chamber of Commerce, Almon L. Fales, of Metcalf & Eddy, engineers, Boston, described in detail how the silk dyeing industries of Paterson solved the problem of industrial waste disposal. Basing his remarks on an investigation of conditions made by his company, Mr. Fales outlined the excellent results which have been attained through the cooperative efforts of the city and the industry. The change from skein dyeing to piece dyeing of tin-weighted goods is held by Mr. Fales as being largely responsible for the increase in dyehouse wastes which has taken place in recent years.

The single-connection system, by which those machines which discharge objectionable wastes are connected to the sewer and those which do not are connected to the river, is more practical he said than the dual system, by which each machine has two connections, one to the sewer and one to the river, in order that judgment may be used regarding the disposal of whatever waste the machine may contain. Difficulty in supervision is the main objection to the latter plan, he pointed out. Benefits derived from proper separation of wastes, according to Mr. Fales, include elimination of river pollution, maintenance of satisfactory river level in dry weather, and reduction in the cost of sewage disposal.

The Institute idea was warmly supported by E. F. Gerish, Chief Regional Division, Department of Commerce, Washington, who said such an organization could do much for the silk trade by stimulating greater study of geographical distribution and sectional markets. He deplored the prevailing ignorance of industry as a whole regarding the different tastes and preferences of the different sections of the country. Other speakers at this session were Ernest Barber, silk consultant, who was chairman and Mr. Wilson, of the Chamber of Commerce.



Two Institute luncheon sessions followed, one group considering commercial arbitration, personnel and finance, the other being devoted to costs and research problems.

The cause of commercial arbitration as applied to the silk trade was strongly supported by S. Whitney Landon, member of the board of directors of the American Arbitration Association, and John O. Benson, Paterson attorney. Both urged more general use of arbitration in solving silk trade disputes, contending that such method saved time, avoided cost litigation and permitted friendly adjustments which made possible continued business relations between disputing parties. Addison P. Rosencranz, another Paterson attorney, took the negative view, asserting that as yet commercial arbitration has not proved successful due to the loopholes in the law which permitted delays and appeals even of cases which had been formally submitted for arbitration.

Unemployment being so vital an issue today, the talks on this subject were particularly significant; indeed, numerous silk men present considered them among the highlights of the Institute's program. Col. Charles R. Blunt, Commissioner of Labor for N. J., said members of the silk trade could do much to solve the problem of seasonal employment by diversifying their products so that they would not have slack seasons. Eventually manufacturers themselves benefit by labor stability, in

that it reduces labor turnover and makes possible a more efficient organization. He deplored the tendency of some firms to hire workers at abnormally low wages which he said, merely results in having the workers quit as soon as they get jobs at adequate wages.

Mrs. Josephine Barron, superintendent of the Clothing and Needle Trades Bureau of the Department of Labor, represented Secretary Doak, and she told of a textile labor study she is now conducting for that department. In the last 30 months up to end of July, the trend of employment was decidedly downward, she said, but the trend through August and September was upward which she regarded as a hopeful sign.

Credit and factoring were considered by the finance luncheon group. Henry M. Hubshman, of H. M. Hubshman & Bro., commission factors, New York, analyzed the function of the factor and said this service is particularly valuable during depressions when hand-to-mouth buying is so prevalent. Forrest S. Dayton, credit manager of John Dunlop's Sons, silk throwsters, New York, and president of the Silk & Rayon Credit Men's Association, said mills could learn much today by studying the operations of the textile firms that have been signally successful despite the depression. He analyzed the various elements which make up a well-administered business, emphasizing true financial reports, frequent inventories, careful watch on overhead and keeping proper books of record.

The banker's attitude toward textile firms' credit was explained by Joseph F. Hammond, vice-president, Citizens Trust Co., Paterson, and president Passaic County Banker's Association, who said "an ideal credit risk combined character, capacity and capital" and he particularly emphasized character.

A joint luncheon was held by the costs committee under the chairmanship of Albert J. Wiley, cost accountant, Paterson, and the research committee, under the chairmanship of Edward Bodmer, Jr., president of the Dyers Association of America, Paterson. In an address on "The Question of Obsolescence," Judge Charles M. Trammell, U. S. Board of Tax Appeals, advised textile men to look at wear and obsolescence from the viewpoint of their profits rather than from that of their taxes, as on the former basis the latter factor will take care of itself. Depreciation, he said, whether due to wear or to obsolescence, is an exhaustion of capital assets, and to ignore it in estimating profits is to return to the stockholders through dividends part of their original capital. These drained assets are often recognized only after the goose which laid the golden egg has been killed. Bookkeeping methods which permit such conditions are as obsolete as the machines themselves. Mills should give full consideration to the obsolescence of such intangible things as patents and so-called secret processes and should recognize the enormity of the waste of money involved in operating obsolete equipment.

A careful separation between fixed and variable costs was urged by Prof. T. H. Sanders, of Harvard University and president of the National Association of Cost Accountants. Under present business conditions, he declared a mill is fully justified in accepting an order if it will cover the variable costs and will make some contribution to fixed charges. Although no one wishes to postpone the return to higher prices, he explained, the fixing of prices is not at present in our power and we must largely accept conditions as we find them. In determining whether an order can be properly accepted, the question as to whether the run will be a long or a short one must be considered.

General view of the Silk Machinery Exposition held at the Fifth Regiment Armory, Paterson, N. J.

That men entering the silk industry should be subjected to an examination which would disclose their fitness to operate a mill satisfactorily from the viewpoint of the community in which it is located was the opinion expressed by Rudolph Muller, instructor of textiles at the Paterson Vocational School. Arthur Booth, instructor of chemistry and dyeing at the same institution, declared that scientific study of fundamentals is hindered by the pressure now exerted on research work and that such study should begin with the silk itself.

Introduced by Mr. Bodmer as the man who has contributed more to the silk industry than any other now living, Dr. D. E. Douty, vice-president and general manager, U. S. Testing Co., New York, discussed the value of fundamental and industrial research. "Co-ordinated research," he said, "to be of value to those participating, should be properly financed, systematically planned, efficiently supervised, and continued for an extended period."

Many Advances in Silk Equipment Shown at Paterson

THE interesting progress which has been made in the development of textile equipment during the last three years was strongly reflected in the National Silk Machinery Exposition, held from November 14 to 21, inclusive, at the Fifth Regiment Armory, Paterson, N. J. The interest of the visitors naturally centered in the new developments, and in the following report of the exposition special attention is given to equipment recently originated or improved. Processes are discussed in logical order.

Popular interest was manifested in an exhibition of cocoon reeling by several Italian women in native dress. The demonstration was under the auspices of the U. S. Testing Co., New York, J. J. Gali, Paterson, and E. Gerli & Co., New York, and provided many experienced silk men with their first view of filature operations.

Throwing Equipment

FOR silk soaking, the Gates-Pfeiffer Engineering Co., New York, showed its pressure emulsifier, with constantly circulating bath, now constructed of stainless steel throughout. The new Stonington winder equipped with oilless bearings, unit-assembly drive, and unit upper crosshead, was demonstrated by the Atwood Machine Co., Stonington, Conn. A rigid-traverse winder exhibited by the Sipp-Eastwood Corp., Paterson, N. J., was equipped with oilless spindle bearings and self-aligning split oilless shaft bearings.

The newest of the throwing machines exhibited was the doubler-twister developed by the U. S. Textile Machine Co., Scranton, Pa. In this machine, gears replace all pulleys, idlers, and belts, even on the spindle drive. This is said to provide cleaner yarn, as the gears are inclosed and there are few exposed moving parts to accumulate and throw off oil, lint, and dirt. In the demonstration the machine was running two-thread with 3½ turns at a speed of 7,100 r.p.m. It was stated that on hosiery tram a twist of 20 turns or higher can be inserted. Suitable tipping of the back feed roller affords a self-separating feature.

Improved features on the 5-B doubler-twister, as demonstrated by the Atwood Machine Co., included strengthened spindles, a spindle drive in which swing spindles are held to the belt by a spring for improved uniformity of operation, simplified and positive stop motion, vertical motor drive with provision for easily changing the direction of twist and the speed of the spindles, vertical type of rings and accessible gearing.

Atwood also showed its recently developed Monarch double-deck twister with ball bearings on the drive, provision for replacing spinner belts endless, vertical motor drive, better oil capacity and circulation in spindles and idlers, take-up driven from the end of the frame opposite to the motor in order that it may be stopped simultaneously with the spindles, and equal spacing of parts on both decks for uniform tension. A double-deck twister exhibited by the U. S. Textile Machine Co., Scranton, Pa., was equipped with an individual motor for each deck and arranged for endless replacement of belt. The Advance redraw frame, another machine developed by Atwood within the last two years, contained many of the features of the Stonington winder, including particularly the provisions for eliminating oil staining.

The Foster Machine Co., Westfield, Mass., demonstrated its model 75 precise-wind silk winder, designed for gradual starting of the spindles and equipped with the Foster conditioning apparatus and with gear fixed gainer. A reconditioned Universal No. 90 copper, equipped with bunch-builder attachments and individual-motor drive, was shown by the Paterson Silk Machinery Exchange, Inc., Paterson, N. J. The Universal Winding Co., Boston, Mass., demonstrated the winding of silk and rayon on its No. 30 coner, with new easily adjustable and sturdy control for the differential anti-wear tension and pressure devices and with gravity oiling system preventing excessive accumulations.

Represented by the Textile Supplies, Inc., Paterson, N. J., were several manufacturers of throwster's supplies, including Dana F. Courtney Co., Chicopee Falls, Mass., manufacturer of quills and bobbins; Vermont Spool & Bobbin Co., Burlington, Vt., spools, skewers, and wood turnings; Lestershire Spool & Mfg. Co., Johnson City, N. Y., fiber-head bobbins of both the pressed-on-head and ring types; Wayne Mfg. Co., Honesdale, Pa., winder spindles, cop spindles, quiller spindles, throwing-machinery parts, spinner change gears, flyers, and flyer blocks; New England Paper Tube Co., Pawtucket, R. I., tubes and cops; Middlesex Paper Tube Co., Lowell, Mass., spiral wound tubes; and Walton Trunk Co., New York, fiber and steel textile containers. Fiber-head spools were also exhibited in another booth by the Passaic Bobbins Co., Inc., Paterson, N. J. In the booth of the Johnson Engineering and Mfg. Co., Wilkes-Barre, Pa., was shown Udylite all-metal rust-proof bobbin boards, quill boards, cone boards, and mill and steaming trucks. The Clover Leaf Mfg. Co., Honesdale, Pa., exhibited an extensive line of bobbins and spools.

Warp Preparation

AMONG the newest of the machines shown at the exposition were the over-end creel and high-speed warper of the Sipp-Eastwood Corp. Important features of the warper include variable-speed drive, gear-driven warping and beaming carriages, gear-and-pinion drive with disk-clutch control for warping, multiple disk-clutch control for beaming, non-reversible worm-driven beaming car-

riage without ratchets, an indicator clock which may be used to stop the warper according to a predetermined schedule, and an automatic multi-colored lighting system which shows the reason for automatic stopping of the warper. Each cone- or spool-carrier bracket of the new over-end creel forms a complete unit with a tension device and can be shifted individually or collectively to any horizontal or vertical spacing relationship. Changing from one type of yarn bracket to another necessitates the renewal of only the top and bottom rails. Since the warper may be started and stopped suddenly without affecting the tension, a tension dresser is unnecessary. A broken end stops the warper and lights an individual lamp on the top of the row in which the end has broken. If the particular lamp concerned is defective, another lamp in one of the adjacent rows lights dimly. No drop wires come in contact with the yarn.

Another new warper was shown by the Van Vlaanderen Machine Co., Paterson, N. J. This is a section type which winds directly from the creel on to a short beam. A number of these short beams are later fed to the slasher without any separate beaming operation and therefore without holding up the work of the warper—a beam of loom width being the product of the slasher. The creel holds 1,000 bobbins of 3-in. diameter, and the entire unit requires little floor space. This system of warping, while differing radically from the cotton and silk systems, resembles the section method which has been used in the wool industry.

An all-steel horizontal type of warper was exhibited by the Watson-Flagg Machine Co., Paterson, N. J., equipped with Watson-Flagg motor drive. A reception booth was maintained by Charles B. Johnson, Paterson, N. J., and visitors were taken to a nearby Paterson mill where the Johnson rayon warp sizing machine could be seen in operation.

Two warp-twisting-in machines, one operating on silk in a loom and the other operating on rayon away from the loom, and a warp-tying-in machine operating on a georgette warp of 75 turns per inch and composed of two right and two left twists, were demonstrated by the Warp Twisting-in Machine Co., Brooklyn, N. Y. The harnesses and warp used in this exhibit were equipped with four- and six-bank stop motions. A new feature shown by this company was a portable warp-stop-motion bracket, which makes possible the transferring of the harnesses equipped with warp stop motions intact from the loom to the drawing-in department, securing the drop wires to the harness rigidly.

Weaving Equipment

TWO models of the new "Super" silk loom, one automatic with dobby and the other non-automatic with cone, were shown by the Crompton & Knowles Loom Works, Worcester, Mass. Features of the frame include heavy loomsides ground on both faces and bored in pairs for accurate alignment of shaftings, structural-steel girts and arches, machined surfaces on parts attached to the loomsides in contact with machined pads on the latter, and heat-treated bolts. Features of the driving and shipping include cartridge bearings held in holes bored in the loomsides, ring gear held on hub by cap screws for easy timing or making use of unworn teeth, internal-expanding rings, clutch without end thrust, brake and shipper handles at each end of loom, and easily adjusted band brake controlled by brake lever and toggle joint. On the new batwing motion the picking shoe has a long sweep and gives constant acceleration to the shuttle. Layswords, layends, and laywood are bolted to a structural-steel angle base and can be changed readily from 2x1 to 4x1. A loose-reed motion is designed to hold the reed in place at time of picking. Cone, dobby, and Knowles positive harness motions are readily interchangeable; and the dobby is so designed that, when the harnesses cross, the reed is in the same position relative to the fell of the cloth on one pick as on the next. A new type of shock-absorbing bunter iron takes the blow of the bunter lever on a three-leaf spring. The beam stands are so designed that with the same parts three different lengths of beam can be accommodated. The take-up has been designed for durability, easy adjustment, efficient lubrication, and smooth operation. Also included in the Crompton & Knowles exhibit were feeler motions, warp stop motions, and an automatic let-off.

Two F-4 model silk looms, one with dobby and one with cone harness motion, embodying a number of new features, were demonstrated by the Draper Corp., Hopedale, Mass. Filling stop motions shown on these looms contained the midget electric feeler and modified midget feeler with four-pick electric knock-off for use on silk wound on wooden quills without tinfoil, brass, or other conductor material, and the No. 1 spring-plunger electric feeler with two continuous helical springs as contact plungers for use where there is danger of coupling with other types. A new type of three-finger driving clutch is controlled by a floating cone collar which assures even driving pressure without end thrust, permitting quick starting and releasing. The No. 4 automatic let-off was equipped with a uniform automatic tension device for weaving out an entire warp without manual adjustment of the tension. The let-off control was at the front of the loom on the take-off end for simplifying joining. A double pressure roll on the No. 4 take-up is suitable for heavy weaves. A yielding reed, fixed during the flight of the shuttle and loose at the front center, takes care of irregularities in let-off and may be used without changes of parts on any weight of goods. To reduce picker-stick breakage and to provide more gradual checking of the shuttle, the cam and shoe check on the plain end of the boom has been replaced with a Reeves spring check. The No. 4 intermittent gear box motion has been equipped with a simple and accurate timing motion, and Zerk Alemite equipment has been applied to the No. 3 spring crank arms.

A reconditioned Crompton & Knowles 2x1 52-in. silk loom was exhibited by the Paterson Silk Machinery Exchange, Inc. Saentis, Inc., Union City, N. J., exhibited a Saurer high-speed single-shuttle ribbon loom, having independent shuttles for flexibility of manufacture. Saentis also showed an enlarging apparatus which projects a design on to point paper for tracing preliminary to preparing jacquard and other textile designs. A Crompton & Knowles Worcester 54-in. 2x1 box loom equipped with A and B let-off motions, cut down from a width of 72 in. was displayed by the Silk City Exchange, Inc., Paterson, N. J.

The well-known K-A electrical warp stop motion, operating on a two-ply crepe with six-thread filling, was

shown by the Rhode Island Warp Stop Equipment Co., Pawtucket, R. I. This company also showed various types of feelers and a timing device for stopping the exhausted shuttles in the plain box. Durable take-up and temple rollers embodying covered steel drums, and metal-coated quills and cops, were included in the exhibit of the Silk City Metals Coating Co., Inc., Paterson, N. J.

Heddles, frames, reeds and other harness-equipment accessories were displayed in the booth of the Steel Heddle Mfg. Co., Philadelphia, Pa.; and working exhibits of Steel Heddle harnesses were demonstrated in the booths of the Crompton & Knowles Loom Works and the Draper Corporation. Steel Heddle equipment for weaving leno, a fabric of timely interest to silk mills, was especially featured. Textile Supplies, Inc., showed crepe rubber developed by La Favorite Rubber Mfg. Co., Hawthorne, N. J., picker sticks manufactured by the Pearl River Valley Lumber Co., Canton, Miss.; heddles from the Walker Mfg. Co., Philadelphia, Pa.; drop wires from Geo. E. Kilburn Co., Milford, Mass., twine from the Linen Thread Co., New York; felt from the Rosella Mills, Inc., West Warwick, R. I.; and heddles and false reeds by French Heddle Co., Orangeburg, N. Y. An automatic let-off for ribbon looms was demonstrated by the Hakemeyer Machine Co., Paterson.

Dyeing and Finishing Equipment

NEW types of dyeing equipment included a skein dyeing machine of unique design and a semi-open-width machine intended particularly for dyeing velvets and other heavy silk fabrics. The skein-dyeing machine, which was described at length in our issue of July 25, was shown by Smith, Drum & Co., Philadelphia. It is particularly recommended for the application of vat colors to rayon, silk, and cotton, permitting the skeins to be entirely immersed in the liquor at all times, and thus preventing premature oxidation of the color. It is also designed to leave the yarn in an excellent winding condition even after unusually long dyeing periods.

The semi-full-width machine, which was demonstrated by Van Vlaanderen Machine Co., laces the cloth in a figure-of-eight pattern, thus minimizing tension and danger of chafe marks. The machine is of a large capacity, holding 25 to 50% more cloth than older models, with resultant savings in water, steam, and dyestuffs.

Three models of jigs were displayed by various manufacturers. General Machine Co., Paterson, N. J., showed a machine of this type which is full ball-bearing equipped, has a multiple-disk clutch, cut beveled gears running in oil, and tilting expander. A standard jig for silk dyeing, exhibited by Morrison Machine Co., Paterson, N. J., is equipped with totally enclosed disk clutches mounted directly upon the beam-actuating mechanism, the beams being driven by cut helical gears operating in an oil bath to prevent possible binding. Another jig, giving constant cloth speed and fitted with automatic reversing arrangement which can be set at any predetermined point to operate independently of shrinkage or stretch of the fabric, was demonstrated by Van Vlaanderen Machine Co. The jig can also be set to stop at any number of predetermined runs, and a control device permits a constant tension on the fabric to be maintained throughout the dyeing operation. An oval reel constructed of monel metal, which is designed for use on various types of silk-dyeing equipment, was shown by Hinnekens Machine Co., Paterson, N. J. This company also displayed a reversible-drive suitable for a diversified line of textile machinery, and a section of a roller-bearing dry-can unit.

Three types of extractors were displayed by as many machinery builders. Haring & Stephens Co., Paterson, N. J., featured the Hercules automatic hydro-extractor which is designed to eliminate all variation in extracting. In operating this machine, it is only necessary to close the guard cover; the extractor then starts; runs for any predetermined period; and actuates a timer which disconnects the motor, applies the brake, and signals the operator. To withstand the unusually severe strains on a machine of this type, in a full-width horizontal extractor, particularly adapted for delicate fabrics, and displayed by Morrison Machine Co., both live- and dead-head bearings are Timken roller-bearing mounted and completely sealed in oil housings; in addition, an ingenious arrangement of the locking handle makes it impossible to close the cover of the machine until the locking of the machine is completed. A vacuum extractor designed for extracting heavier grades of fabrics at full width, was exhibited by Werner Machine Co., Passaic, N. J. Features of this machine include a Nash vacuum pump and a plunger which controls the width of the suction surface. This company also showed self-aligning roller bearings for can dryers designed to eliminate wear on the journals.

For printing silk, rayon, and other fine fabrics, a six-color printing machine was exhibited by Textile Finishing Machinery Co., Providence, R. I. This equipment is now fitted with a new swivel-tension attachment combined with a scrimp bar allowing the tension roll with serrations to be used if desired, or to be thrown out of position when running chiffons or other light fabrics. Fabrics printed with various types of its equipment were also featured by this concern. A laboratory printing machine which finds application in testing printing gums and other experimental work was demonstrated by Jacques Wolf & Co., Passaic, N. J., representatives for Societe Alsacienne de Constructions Mecaniques, Mulhouse, France.

Two types of engraved copper rollers for printing on silk were displayed by Bliss Engineering Co., Paterson, N. J. One roller is used in the multi-color process in which only three rolls are required to obtain innumerable colors and shades. The other roller, which is produced by the Pan-Tech method, permits printing of various techniques on a single roller.

In the wide variety of finishing equipment on exhibition, particular emphasis was placed on Palmer machines. A compact model featured by General Machine Co., stands 4 ft. 6 in. high, and permits the operator to look down the frame connected with the Palmer so that he has a clear view of the fabric at all times. This machine is equipped with SKF bearings, and also with a clutch which may be disengaged, thus permitting the unit to be run as a frame alone. A Sanforizing Palmer, such as is employed in its improved Sanforizing equipment, was shown by Morrison Machine Co. The 60-in. cylinder on this machine is made with double walls, giving a comparatively small steam space to prevent rapid expansion of steam, preserve its high temperature, and reduce condensation to a minimum. For use in Sanforizing, the

Palmer is equipped with a series of shoes having concave surfaces which fit the convex surface of the blanket, and which are heated to 400° F. by means of electrodes.

An improved three-roll silk calender shown by H. W. Butterworth & Sons Co., Philadelphia, is equipped with friction let-off at entering side, slip-belt winder at delivery side, adjustable tension rods, and Alemite lubrication throughout; other features are Meehanite metal castings, roller bearings, friction clutch, and easily operated compound leverages giving pressures up to 20 tons.

A combined quetsch, frame, and Palmer was displayed by Van Vlaanderen Machine Co. Features of this equipment include an automatic control on the quetsch which compensates for any shrinkage of the fabric, causing the quetsch to operate in synchrony with the frame; gas burner, with pilot, operated by push-button control at the front of the machine; and a detached-link tenter clip which does not drop on the plate, and thus prevents wear on both the clip and plate. This company also showed an improved doubler, with a reel holder which is adjustable to various widths of fabrics. An improved rubbing machine demonstrated by Scandia Mfg. Co., North Arlington, N. J., is equipped with a new positive, silent drive; two oil feeds in place of one on previous models; a pivoted table which gives even tension on all parts of the fabric; and a control device which permits heavy or soft rubbing. In addition to a display of photographs illustrating its various types of dyeing and finishing equipment, Birch Bros, Somerville, Mass., showed a butt-seam sewing machine of the portable type which gives a positive cloth feed, and insures that the selvages will come out even; two Coronation machines for chain stitches, one motor driven, and the other foot driven; and an Excel revolving looper. Several of the exhibitors, including H. W. Butterworth & Sons, Morrison Machine Co., and Textile Finishing Machinery Co. showed various types of tenter clips, the last-named concern featuring two new types designed for silk and rayon. One of these is designed with a brass swivel insert and patented gate with hold-back device to do away with chatter of the gate when the clip is empty; the other is fitted with three-finger control, and monel metal plates and inserts. Felt rubbing mediums, endless sleeves, and Palmer blankets were displayed by Aetna Felt Co., N. Y.

Soaps, Chemicals, and Finishing Compounds

LABORATORY set - ups and displays of processed yarns and fabrics gave added interest to a number of the exhibits of textile soaps, chemicals, and finishing compounds. For example, Atlas Refinery, Newark, N. J., demonstrated the manner in which photomicroscopic apparatus is employed to assist customers in developing new finishes and to show the action of various compounds on yarns and fabrics. This company also featured a new white sulfonated tallow used in dyeing and finishing, and a highly sulfonated, clear olive oil for finishing tin-weighted fabrics.

A complete chemical-laboratory unit, maintained by Onyx Oil & Chemical Co., Jersey City, in its booth, demonstrated the manner in which strict laboratory control is exercised by this company. Samples of hosiery and woven fabrics processed with Onyx products were displayed; and new finishing compounds especially featured by this company were Velvoshene, and Chamoschene for producing a soft, French finish.

National Oil Products Co., Harrison, N. J., in addition to a display of thrown yarns and knitted and woven fabrics treated with Nopco products, had a chart showing the different processes in which textile oils are applied, and illustrating with samples the particular type of oil employed in each process. Aside from the sample laboratory printing machine mentioned previously, Jacques Wolf & Co. exhibited a number of specialties for dyeing, weighting, finishing, and printing silk and rayon, featuring Supertex, a new textile printing gum.

Castrolite, a new light-colored, 85% sulfonated oil made by a special process and recommended particularly for use on fabrics dyed in light or brilliant shades, was emphasized by Royce Chemical Co., Carlton Hill, N. J. This company also featured Velvo-Ray A, a specially prepared olive oil for use in silk finishing and dyeing; Discolite, for use in discharge printing; and a newly developed, 50% sulfonated tallow.

Other companies showing a diversified line of textile soaps and chemicals were Armour & Co., Chicago; Colgate-Palmolive-Peet Co., Chicago; Olive Oil Soap Co., Paterson, N. J., and Wollen Chemical and Supply Co., Paterson N. J.

An educational exhibit, featuring the color cards created by this association, were displayed by the Textile Color Card Association of the United States, New York.

General Mill Equipment

SEVERAL new and improved products were noted in those booths devoted to the exhibiting of general mill equipment. In the humidifying and ventilating group, humidifiers featuring automatic control were displayed by American Moistening Co., Providence, R. I., and Bahnson Co., New York. The former company made a special exhibit of their small-capacity humidifier designed for use in silk vaults and full-fashioned knitting rooms, while the latter stressed the control feature of their equipment and laid particular emphasis on their Type H high-duty head. Paragon ventilating units of the exhaust-fan type as manufactured by the American Propeller Co. were displayed by J. F. Cermak Co., New York. The blades of these fans are constructed of wood and covered with Monel metal to insure durability.

Schopper instruments for determining the various physical properties of silk were shown by Testing Machines, Inc., New York. An instrument for maintaining temperature control within a few one-hundredths of a degree was featured in the booth of Uehling Instrument Co., Paterson, N. J., which also included a device for controlling humidity, and CO_2, vacuum, draft, and pressure gages having automatic recording devices.

Wooden tanks that are used in the dyeing and finishing industries, and mechanical agitators used in connection with them, were shown by two companies—Atlantic Tank Corp., North Bergen, N. J., and General Tank Corp., Kearny, N. J. In connection with the latter exhibit, Clarke Transmission Co. showed a Rockwood drive applied to a mechanical agitator.

Water-treating equipment and water-softening prod-

ucts were given special emphasis by the Permutit Co., New York, and Hungerford & Terry, Inc., Clayton, N. J. An electro-chemical feed for adding chemicals to water, used especially in the recovery of tin-weighting materials, was emphasized by Permutit. For producing fully saturated, clear brine from rock salt, a new dissolver was exhibited by International Salt Co., Inc., Scranton, Pa.

The power-transmission field was represented by three companies dealing in this type of equipment. Cord-reinforced rubber-compound belts and bearings, featured by an exhibit of Parok oilless bearings for use in color boxes, were displayed by Raybestos-Manhattan, Inc., Passaic, N. J. Automatic, variable-speed transmissions, featuring the new centralized system of lubrication, were shown by Reeves Pulley Co., Columbus, Indiana. Spinner belts and SKF transmission products were featured in a display by Bernstein Bros., Inc., Paterson, N. J., which also included an exhibit of belting and flat-belt, short-center drives.

Rubber products were displayed by the Manhattan Rubber Mfg. Division of Raybestos-Manhattan, Inc., Passaic, N. J., and American Hard Rubber Co., New York. The former presented its rubber-lined tanks, rubber-covered rolls, and hard-rubber containers, while the latter showed its hard-rubber-lined and hard-rubber tanks, pumps, pipes, valves, and fittings.

In the electrical field textile-mill motors were stressed. P. N. Thorpe & Co., New York, and Diehl Mfg. Co., Elizabethport, N. J. featured the application of individual motor drives to silk looms by a demonstration of one of their units attached to a loomside, and demonstrated their new motor, which is distinguished by improved electrical characteristics, good balance, and the ability to clean itself of lint or dirt accumulations through its ventilating construction. Watson-Flagg Engineering and Machine Cos., Paterson, N. J., official electricians for the show, exhibited, besides their new all-steel, variable-speed silk and rayon warper, textile motors for spinners, winders, warpers, and looms, together with a general line of electrical supplies. A new type of automatic electric control as applied to variable-speed transmission was demonstrated by Reeves Pulley Co., Columbus, Indiana.

Ingersoll-Rand Co., New York, displayed a variety of high-capacity centrifugal pumping units. The pump and motor are built as one unit, thus eliminating the need of a coupling and minimizing the number of bearings and moving parts.

High-pressure rotary pumps and liquid and trash pumps were displayed by Deubel Rotary Pump Co., Clifton, N. J., and Watson-Flagg Engineering Co., respectively. General factory supplies featured by Geo. A. Myers & Co., Inc., Paterson, N. J., included hoists, drills, acid-resisting paint, pipe fittings, and valves.

John P. Nissen, Jr., Co., Philadelphia, Pa., displayed indelible marking inks used in the textile industry. Four-grip tool holders, insuring pressure on all sides of the tool, and the Vulcan electric band-saw brazer were given special emphasis by Hackemeyer Machine Co., Paterson, N. J. Lubricating oils designed particularly for various textile machines featured the exhibit of Three-In-One Oil Co., New York.

A variety of silk and rayon fabrics was exhibited by B. Edmund David, Stehli, C. K. Eagle, Concordia, L. & E. Stirn, Doherty & Wadsworth, Conrad Hosiery, Bemberg, Onondaga, and Haas. Textile designs were shown by a number of design schools. Yarns were exhibited by the Malina Co. of New Jersey, Inc., Paterson.

National Silk Convention

Reviews Trade's Major Problems

NATIONALLY known textile leaders and others reviewed outstanding problems of the silk industry at the National Silk Convention which was held Wednesday and Thursday, Nov. 18-19, as part of "Silk Industry Week," in Paterson, N. J. The convention sessions, at the Alexander Hamilton Hotel, Paterson, attracted large numbers of textile men who divided their time between these events and the Silk Exposition at the Armory. The silk convention was opened Wednesday morning with addresses by representatives of the City of Paterson, including James Wilson, president of the Chamber of Commerce. Interest at that session centered on the address of Thomas B. Hill, president of the Silk Association of America, who analyzed current trade abuses in the silk industry and offered suggestions for their possible elimination. Among the major abuses stressed by Mr. Hill were: under-capitalization, over-production, poor styling and near-sightedness as regards market trends. He said the effect of these was to demoralize the market, to halt buying and to create instability resulting in a disproportionate number of failures in the industry.

Mr. Hill briefly reviewed the constructive work being done by the Silk Association including the trade survey now under way and the curbing of design piracy practices. He pointed out, however, that distribution problems, the most serious of all, are not yet solved and he urged closer cooperation between buying groups and manufacturing groups as a step toward this end.

Mr. Hill's latter points were directly answered by another speaker, Walter H. Dietze, general sales manager of Stehli Silks Corp., New York, who said that, even as garment manufacturers must work in close contact with retail outlets to know the sales trends, so the manufacturers of fabrics must work "as closely as possible with the garment man and retail silk buyer."

Mr. Dietze said closer cooperation between buyer and seller was "the secret of the present day silk business"; he deplored the tendency of manufacturers to "produce a fabric and then trust to the gods to properly distribute it."

Mr. Dietze's address was made at a luncheon session at which "distribution" was the keynote. Other speakers

at mid-day luncheons were Francis T. Lyons, Sr., vice-president, Commercial Factors Corp., who spoke on "marketing silk"; Mrs. Margaret Hayden Rorke, of the Textile Color Card Association of the U. S., who spoke on "the value of cooperation as shown by color card activities"; Geo. A. Post, of Post & Sheldon, who discussed raw silk production problems; Harry A. Mereness who asked for a more sympathetic attitude toward the Japanese reelers in their tasks, and Donald D. Leonard, who spoke on raw silk distribution.

Still another speaker Wednesday was H. E. Bishop, Jno. Dunlop's Sons, Inc., New York, who emphasized the importance to quality of scientific methods in every step of manufacture. Even when silk is purchased on a certified basis, he said, laboratory tests are necessary to determine for what purpose the raw stock is suitable. The accuracy of the thermometers used in soaking should be checked regularly. Machine soaking provides speed and uniformity, but there is a question as to whether it ruptures the fibers. Mr. Bishop recommended the use of the stroboscope for measuring machine speeds. Quality, as well as quantity, should be considered in establishing wage-incentive systems. Whether the tension on the silk in process is satisfactory can be determined by careful inspection of the finished package. Time and temperature in twist setting can best be governed by automatic control, he said.

Vocational education, art in industry and textile standards were among the chief subjects considered when the silk convention resumed on Thursday morning. L. R. Gilbert, of the Division of Trade Standards, Bureau of Standards, Department of Commerce, Washington, told of standardization work being done by his organization in the textile field, describing the recent code shaped for the knit underwear industry. He suggested that standards might be similarly established for woven silk fabrics and might help toward stabilization of the latter industry. Another suggestion offered by Mr. Gilbert was that the fabric manufacturer label his product with his firm name, a practice which now is followed only by part of the trade.

"Standardization of quality," the speaker added, "is more necessary now than at any time in our history, since it would either drive the manufacturer of cheapened fabrics out of the market or force him into the open where his product would be seen and recognized for what it is."

Alon Bement, director of the Art Center, New York, who spoke on "Uses of Art in the Industrial Field," urged broader recognition of the importance of style and emphasized the growing importance of the stylist's position in the manufacturer's organization. Another speaker at this session was Wesley J. O'Leary, Assistant Commissioner of Education of N. J., who spoke on "Vocational Education in the Textile Trades."

The Thursday luncheon session which concluded the convention proved one of the most interesting of the two-day meeting, including discussions of the economic trend of the silk trade, silk trade bankruptcies and taxes. Dr. Clyde William Phelps, of the University of Chattanooga, Tenn., reviewed the silk industry's status since pre-war days, tracing developments up to the current depression period which he said was caused by the same forces that precipitated the 1920-1922 break-down. Commenting that the silk industry today includes "1,000 small operators who call themselves manufacturers while 90% operate with silk owned by factors or others," he said such manufacturers are really artisans. He said too many fabric commission houses do profitless business for factors and asserted the future of the silk trade hinged largely on solving that problem.

Of especial interest was the statement by Dr. Phelps that the "silk dyeing trade is tending the same way and that unless the trend is arrested the legitimate dyer who operates with sound cost knowledge will be worn down financially by dyeing firms which follow the methods of the broadsilk commission firms." He stressed greater study of costs, research and better ethics as the trade's chief needs.

Bankruptcies in the silk industry were subjected to keen analysis by C. Edward Benoit, attorney, who described policies of the none too ethical silk manufacturer as differentiated from the racketeer or the honest bankrupt, and Mr. Benoit in summation said much of the losses suffered by creditors of this particular type of bankrupt could be averted by stricter credit policy. "Fraudulent bankruptcy" he concluded, "should be treated as crime." Discussing tax legislation, Congressman George N. Seger, of New Jersey, said he expected the coming Congress to include many luxuries and non-essentials, not hitherto taxed, in new legislation of this type, suggesting facetiously a $25 tax on silk shirts and on silk underwear for men. Dr. Harley L. Lutz, professor of public finance, Princeton University, also a luncheon speaker, analyzed taxes from the economist's viewpoint, and said the biggest public need in this respect was a closer interest in the nation's financial problems by the people as a whole.

Other scheduled addresses for Thursday were: "Bankruptcies as Part of the Business Structure" by Lloyd K. Garrison, special assistant to the Attorney General, Department of Justice, Washington, "What Design Means to the Silk Industry," by Sol C. Moss, president, Design Protection Association, and "The Need of a Vestal Bill to Protect Designs," by Congressman Albert H. Vestal, of Indiana.

The keen interest which the general public of Paterson feels for its representative industry was reflected by the large attendance on the opening night.

Fifth Regiment Armory, Paterson, N. J.

The groaning of the armory floor and the need for a general lockout on opening night were direct compliments to the fine work of the publicity committee.

Silk Industry Closely Watching Chinese-Japanese Crisis

Re-reeling China silks to reduce defects has become more widely practiced recently by Chinese

By John Black

Assistant Editor, TEXTILE WORLD

SERIOUS extension of the hostilities between Japan and China in Manchuria would have a decided effect upon the Japanese raw silk situation, but the exact nature of this effect is still somewhat in doubt. Sentiment in the New York silk market is divided, with opinion at present tending to deprecate the gravity of the reaction on the Japanese silk industry. Some American importers while watching developments closely, see little likelihood of any drastic effect on silk; they incline to accept the opinion expressed by some of the Japanese group in New York, that the Manchurian conflict is "simply a duplicate of the old-time troubles between United States and Mexico."

The Japanese importers in this country see the disturbance as tending to benefit their silk trade. Some of the important silk districts of China are located within the fighting zone, and silk production there is reported to have been disturbed by the fighting which, causing a curtailment of China's silk exports, has had a favorable effect on Japanese silk exports. While recognizing that the Manchurian situation could easily become more acute and precipitate conditions not now foreseen, Japanese silk men in New York consider that this would be just as likely to help as to hinder their industry.

Finance, Not Labor, Problem

It is pointed out that nearly 90% of silk reeling in Japan is done by women; therefore, any general conscription of man-power in that country, would have a negligible effect on the filatures. However, from a financial point of view the outlook is less assuring as a war would prove an immediate drain on Japanese resources. American silk buyers are giving close consideration to this aspect. Reports have reached textile manufacturers in the southern States, that financial difficulties might cause Japan to liquidate the more than 100,000 bales of raw silk surplus, now bonded in warehouse.

Obviously, any sudden placement of such a vast stock on the market would be bound to precipitate a break in prices. However, neither the American nor the Japanese importers regard this contingency with much apprehension. In the first place, there is a percentage of the American silk-buying trade which would be averse to buying the warehoused silk. This stock has been stored for at least 18 months, and part of the New York buying trade contends that it has deteriorated in quality during that period. Silk technical experts regard that view as unsound, several who were interviewed this week, asserting that Japanese experts knew enough about silk to take the proper precautions.

"It's nonsense," one silk chemist said emphatically, "to suppose that Japan would endanger the value of a stock representing such a large capital investment, by failing to store it properly. The American trade is prone to underestimate the technical training of Japanese silk experts. These men know more about silk than we do."

Dumping Regarded Unlikely

Japanese importers in New York do not see much likelihood of the warehoused silk being "dumped" into the international market, even though war conditions did seriously deplete Japan's finances. These factors add that a Sino-Japanese war would tend to increase silk prices in Japan, as such is the usual reaction of a commodity in war-times. Indeed, current market tone tends to confirm this view. Yokohama prices have been steady for weeks, and during the last ten days have registered an upward movement, bringing New York prices to higher levels.

American silk demand has been backward, but shows improvement. Some buyers anticipate higher levels, due to the Manchurian situation, and are covering more willingly than hitherto. This is far from general, but there is a growing sentiment among New York importers that silk may be on the way up. Slow movement of spring broadsilks has discouraged fabric manufacturers from heavy commitments in the primary market. The last two weeks, however, brought a pick-up in yardage sales and, barring unforeseen developments in the Orient, the remainder of the year should see silk moving steadily in the American market, with prices inclining upward.

Meinhard-Greeff Merger

Gives C.I.T. Immense Factoring Resources

THE factoring businesses of Morton H. Meinhard & Co., Inc., and Greeff & Co., New York, are to be merged and continued under the name of Meinhard, Greeff & Co., Inc. This combination, which at the start will act as factors for more than 125 mills, will operate as an independent unit of the Commercial Investment Trust Corp., New York. That corporation has acquired the Meinhard business and has entered into a contract with Greeff & Co. to acquire the accounts factored by that organization. It is stated that the entire transaction was for cash and will not involve the issuance of any new securities.

The Commercial Investment Trust Corp. is already actively interested in textile factoring through its ownership of Commercial Factors Corp., which is the result of a merger of Frederick Vietor & Achelis, Inc., and Peierls, Buhler & Co., Inc., accomplished in February, 1929, with later absorption of Schafer, Schramm & Vogel and accounts from L. Ernstein & Bro. The Commercial Factors Corp. is considered the largest factoring organization in the world, serving about 150 mills.

The two outstanding textile factoring companies just described, both owned and controlled by the Commercial Investment Trust Corp. will be operated as separate units, pursuing their individual policies and competing for business.

The head of the newly organized Meinhard, Greeff & Co., Inc., is Edward F. Addiss who was associated for the last 20 years with Mr. Meinhard and who was president of his firm since Mr. Meinhard's death last April. All of the other executives of Morton H. Meinhard & Co. will continue in their present capacities, and Enno Greeff and Ernest C. F. Greeff will join the merged organization as executives.

The company's slate follows: president, E. F. Addiss; vice-presidents, H. Clifford Steffens and Enno Greeff; assistant vice-presidents, Ernest C. F. Greeff and Philip Osborne; secretary, Harry J. Delaney; treasurer, Fred Meissner. The board of directors will comprise the officers just mentioned together with Henry Ittleson, president of Commercial Investment Trust Corp., Edwin P. Vogel, chairman of the executive committee of Commercial Investment Trust Corp., P. W. Haberman, vice-president of Commercial Investment Trust Corp. and Robert G. Blumenthal, president of Commercial Factors Corp. It is stated that the business done by the merging companies has been in excess of $40,000,000 annually.

The two companies brought together in this merger have been active in the textile field for many years. Greeff & Co. was established in 1857 and its present officers are direct descendants of the founders. Morton H. Meinhard & Co. was established in 1898. At that time Mr. Meinhard, then twenty-five years old, went into business on his own account and his organization served as selling agent for the Cleveland Worsted Mills Co. for a period of 25 years. He started his factoring business in 1908 and in 1922 relinquished his selling agent's connections to devote his entire attention to the continuance and extension of his factoring business. His business was changed from a co-partnership to a corporation on Jan. 1, 1930, when the company was chartered with a capital of $3,500,000. Mr. Addiss was then vice-president and treasurer. Mr. Meinhard's sudden death took place on April 15 last on the steamer "Resolute" en route from Kobe to Yokohama. His estate negotiated the sale of the business to the Commercial Investment Trust Corp.

The other textile factoring division of C.I.T., also brought together two long-established firms. The business of Frederick Vietor & Achelis was established in 1834 and Thomas F. Vietor, a descendant of the founder became chairman of the board of the Commercial Factors Corp., of which the president, Robert G. Blumenthal, was formerly head of Peierls, Buhler & Co., which was established in 1893.

On Jan. 1, 1930, the business of Schafer, Schramm & Vogel, which had been operating as a partnership since 1838, was acquired and added to the Commercial Factors Corp. and on Oct. 1, 1930, the majority of the accounts of L. Ernstein & Bro., Inc., were also absorbed.

These factoring concerns offer services in financing, credit management, merchandising advice, etc., to mills and selling agents for a wide range of textile products covering woolens, worsteds, cottons, silks, rayons, ribbons, hosiery, underwear, outerwear, etc. Many of the organizations served have offices at the headquarters of the factoring company, but many others are independently located where their business interests may best be served.

The factoring business is related in many ways to the other operations of the Commercial Investment Trust Corp., all of which have as their object the extension of a financing service to facilitate the distribution of products on credit. It is stated that the corporation serves industrial concerns in the distribution of over 80 different types of standard products. It is not unlikely that the total annual business of the two textile factoring units now controlled by the Commercial Investment Trust Corp. may approximate a quarter of a billion dollars.

Freedom of Design

Afforded in Jacquard Gauze Fabrics

By C. F. Harleston

IN THE designing of jacquard gauze fabrics, the technical problems are more absorbing than the artistic. To the sketcher, the gauze fabric is merely a ground for patterns of an open-work nature, and he has no concern with it beyond the item of color value. The weave has been used to a great extent in the manufacture of small wares; and in curtains, scarves, and table covers it offers particularly interesting possibilties.

The example illustrated at Fig. 1 is intended for window curtaining and does not take full advantage of the freedom afforded in design; but the stripe arrangement is admirably suited to the purpose, and it will be seen that there is an agreeable variety of weaves. The gauze variations in the watered effect and spidering part of the pattern call for jacquard control. Nevertheless, a modified version would be feasible in harness weaving on a power loom. The pattern is the result of the development of technical possibilities to the best advantage, and so comes more nearly within the scope of the fabric designer than that of the artist.

It will be noted that in sections *A* and *C* considerable use is made of the effect known as spidering. This effect is obtained by a crossing of threads which, in contrast to the formation of gauze, are displayed upon a foundation fabric instead of forming an open mesh. Advantage

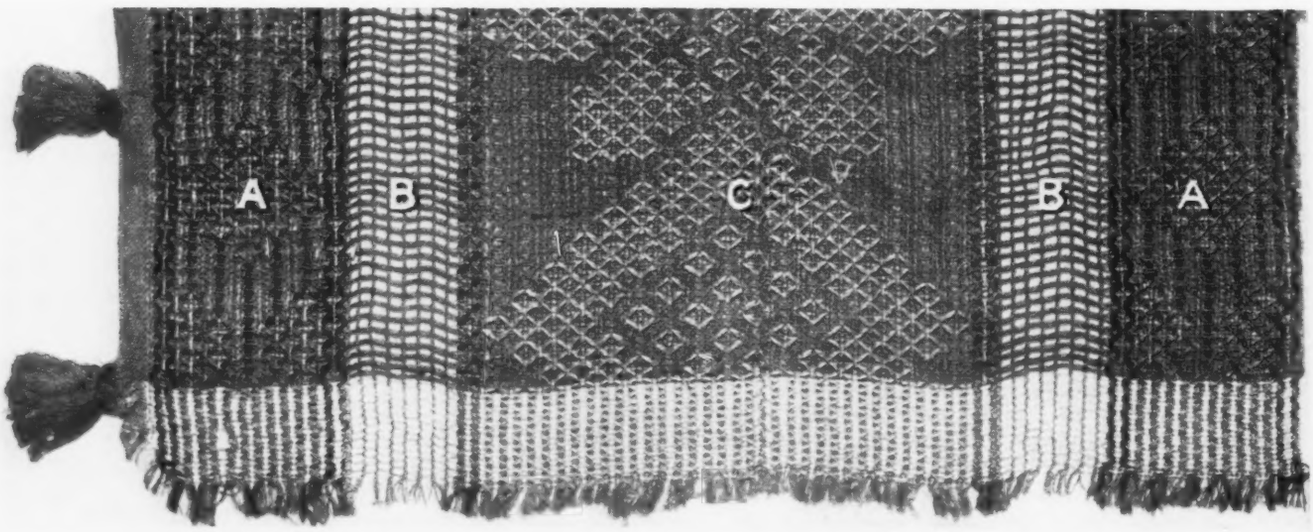


Fig. 1 (Border). Variety of weaves used in window-curtain fabric

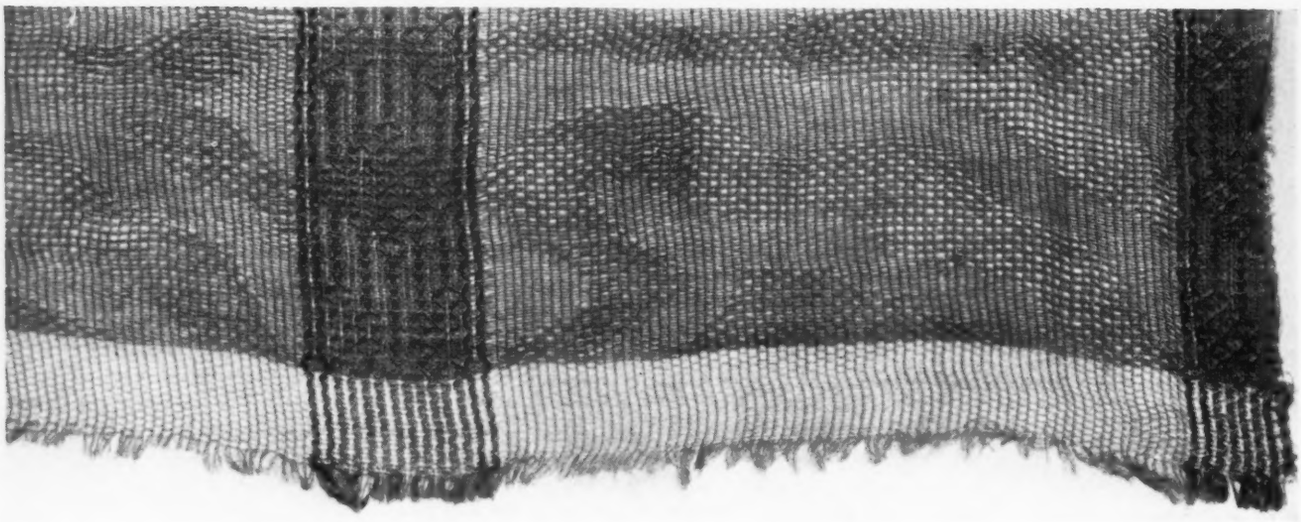


Fig. 1 (Body). Two gauzes are combined to produce a watered effect

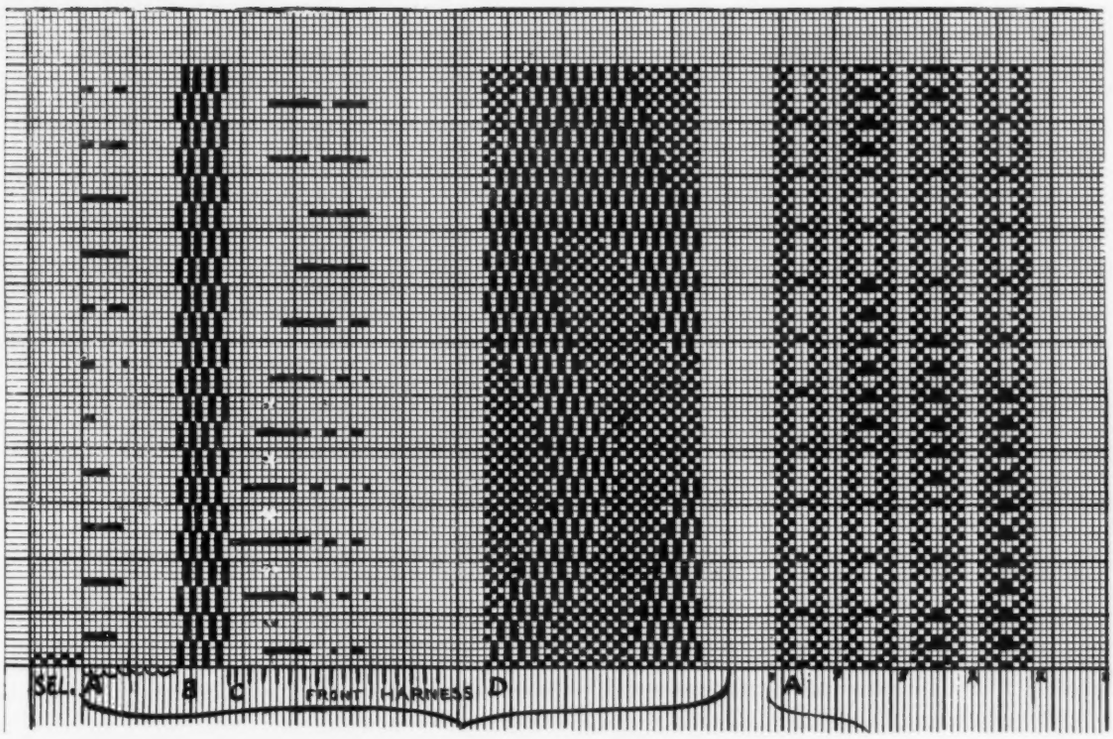
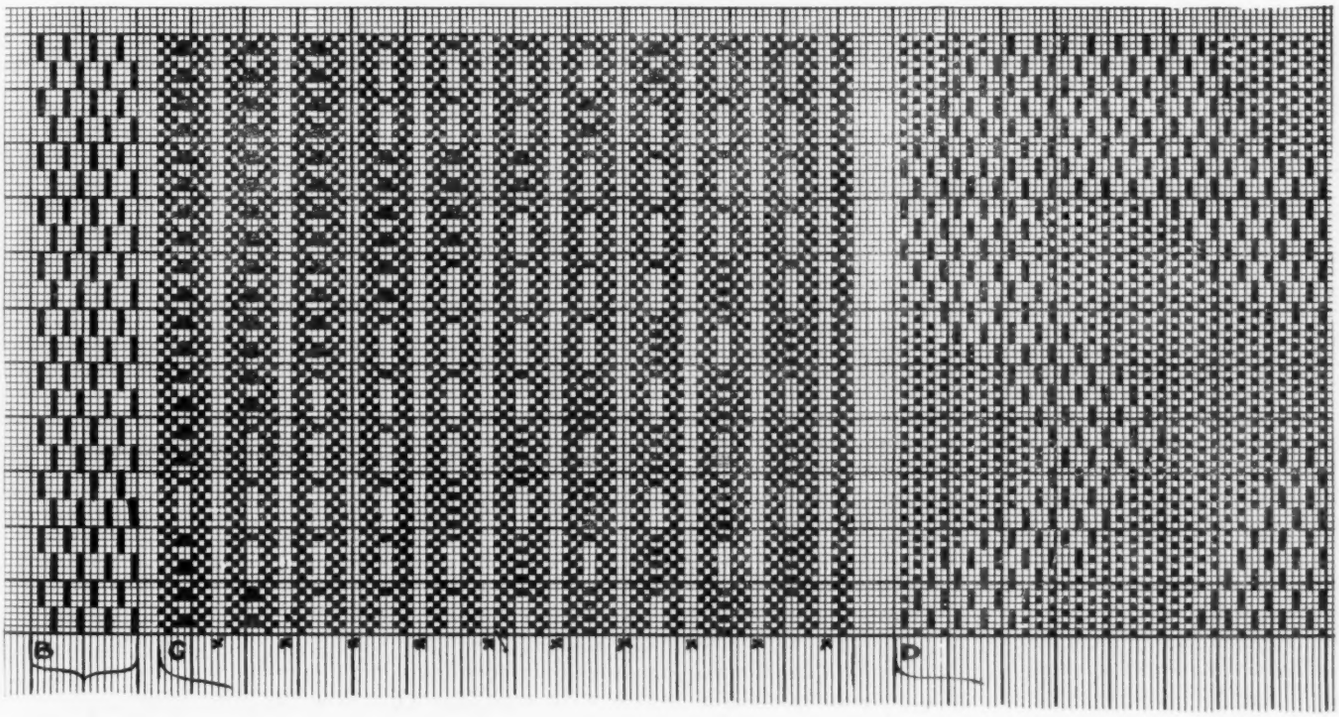


Fig. 2. Curtailed design for weaving fabric shown in Fig. 1. Only a portion of the number of ends required to weave each section is shown. A 600-needle jacquard is required for this design.



is taken of the ability to cross over more than one dent, reed wires having been removed to permit of this; and pairs of figuring threads are made to work in opposition. The threads, being diametrically opposite, form small diamond patterns when taken out of the normal position, and at *C* are elaborated into large figured effects. The very open gauze work which follows provides an agreeable contrast, as does the succeeding colored stripe, which gives place to the watered-gauze effect. Two gauzes are combined to produce this result. One crosses on every pick of the filling. The other is designated as a three-pick gauze. Stripe portions are repeated throughout the filling to give cohesion to the whole curtain layout.

Weaving may be attempted by more than one system, but it is preferred to detail here the standard-doup and main-harness methods, which clearly illustrate the process. These are dealt with in drafting by detailing a front harness portion on the draft and a main harness tie-up.

Method of Weaving

The proportion of front harness and doup strings to the rear harness varies with each pattern. In the finer gauze weaves, the proportion is one-half; but in others it is much less. Spidering threads are sparsely distributed to be effective. The exact proportion is arrived at when all the effects in the main harness are planned, as there may be stripes that employ the main harness only, though not in the present example. The draft at Fig. 2 has been prepared to give a fair idea of the design-paper rendering of the appropriate weaves of the fabric speci-

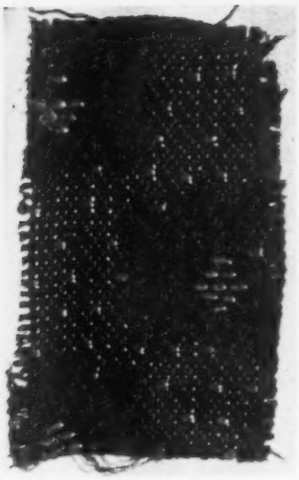


Fig. 3 (left). Four-pick jacquard gauze fabric suitable for neckwear

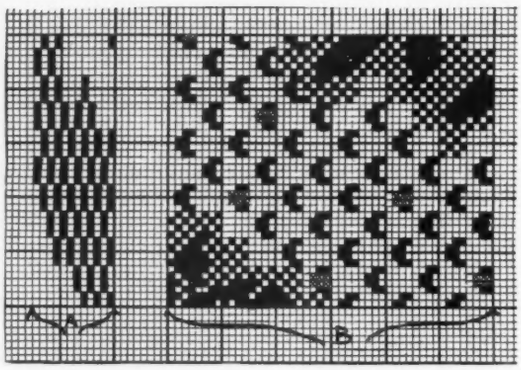


Fig. 4 (right). Design provides for spotting feature introduced by two extra shuttles

men. The draft, owing to its size, has been curtailed; and only portions of the stripes are shown. For instance, at front harness *A* seven standard ends are shown to represent 24 ground-fabric ends repeated in the main harness. Section *B* is complete. Section *C* shows 21 standard ends of the front harness representing 63 ends of *C* repeated in the main harness. At section *D* 32 ends of the front harness represent 64 ends of *D* repeated in the main or rear harness portion.

The ends required to reproduce the fabric sample are for main harness tie, 42 double ends (narrow marginal stripe), 16 double ends of open gauze, 114 double ends of spidered stripe, and 144 ends of watered gauze. The equivalent for front harness is 14 for marginal stripe, 8 for open gauze, 38 for spidering, and 72 for watered gauze. If there are plenty of hooks available, and it is seen that a 400s machine is inadequate, it is advisable to use up the needles as far as possible. The whole of the border may be drafted with advantage, obviating some of the crossings in the tie. The layout would then be: front harness, 14, 8, 38, 8, 14; and the main harness, 42, 16, 114, 16, 42—the sum of these being 312 collectively. Further, the field portion of the curtain requires 72 ends for the front harness, and 144 ends for the rear harness. Add for the narrow stripe, front 14, rear 42; and the total needles employed reaches 584 of the 600s machine. The complete curtain is then made up of the border, followed by four repeats of the watered effect or four ends to the neckband; and these are separated by three repeats of the narrow stripe. The border is then repeated to complete the full curtain.

The setting may be taken as that which appertains to the finer gauze sections of the fabric, woven through a reed of 24 dents per inch, one dent full and one empty. For the open gauze stripe there would be one dent full and two dents empty. In the spidering portions two out of three wires are required to be removed, and this is equal to eight dents per inch.

The method of weaving provides for crossing the threads; i.e., on the watered portion of the fabric, one of the two threads is so controlled that it may be raised first on one side and then on the other of a companion thread, bringing about a crossing over to form technically termed gauze, generally understood to be an open-work fabric. This is accomplished by a doup, known in plain gauze weaving as a half heddle, the loop of which is passed through the eye of the mail of the harness, which is situated in front of the standard or figuring harness. The crossing thread, being already in the heddle of the main figuring-harness cord, is passed through the loop of the doup string protruding from the eye of the front harness end. By this arrangement a thread may be raised by a rear harness end when the doup is also raised, permitting the loop to run through the eye of the heddle; and, again, the same thread may be raised by the front harness when the thread is held against the eye of the heddle by the doup string. It follows that the doup and standard lift raise the warp thread out of its normal course, the position in the figuring harness being regarded as the normal position. This operation entails provision for slackening the warp ends when a crossing takes place, and a separate system is required for the spidering threads because of the difference in take-up.

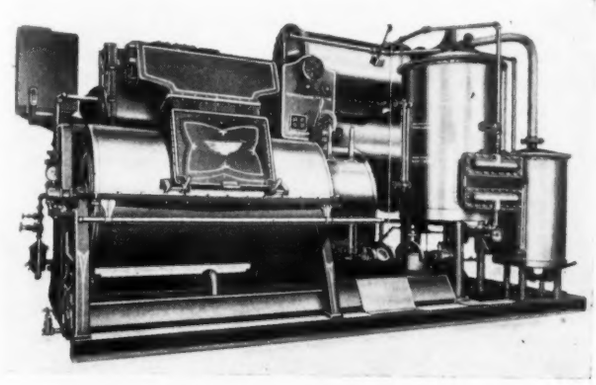
Tension Regulated

If all the threads come from one beam, the pairs of ends concerned in the forming of the gauze are equally distorted; but where there are plain stripes of fabric working in conjunction with the gauze, there may prove to be a lack of tension in weaving in the plain portion. This can be obviated by putting the crossing threads on a separate beam, permitting the let-off to be regulated as required. It is provided that the main-harness ends, not in the front-harness doup, lie between the rear and front-harness ends to permit crossing.

Jacquard gauze is further illustrated at Fig. 3, which is a fabric of the smallware class suitable for neckties. The gauze here differs from the curtain fabric in that it is a four-pick weave. The character of the weave is shown at Fig. 4. By means of two extra shuttles a spotting feature is introduced. As these are of brighter tints, it is necessary that they be effectively concealed where not figuring on the face of the cloth. It will be noted that in the gauze ground, one thread is controlled by the standard-doup harness and that there are three threads controlled by the main harness. The painted lifts of the gauze portion have a great deal to do with the character of the weave, as it is of a special type. An open gauze develops the defect of being easily pulled out of shape, and provision is made in this case for the further interlacing of the threads to acquire a firmer structure. The most effective and convenient way of spotting is to insert extra filling with the two central picks of the group of four; and it will be seen that both spotting shuttles are occasionally brought together, though for the most part they are used separately. In this position the greatest means of cover is afforded. The problem of concealing extra filling, therefore, is solved.

Improved Equipment Permits General Use of Dry-Cleaning Methods

By Paul S. Brallier



Improved equipment favors general adoption of dry-cleaning methods by textile mills

THE experience of a prominent hosiery manufacturer in successfully solving the problem of removing oil and grease spots from his finished goods illustrates how improvements and developments in one industry often make possible important developments in another. This manufacturer had been using wet-washing methods for removing oil and grease spots with only moderately satisfactory results. It was suggested to him that he might find a newly developed dry-cleaning unit, which employs carbon tetrachloride as the cleaning solvent, a more efficient means of removing the oil which is apt to stain the fabric as it passes through the knitting machine.

Since there happened to be such a dry-cleaning unit already established in his city, the manufacturer sent a trial lot of oil-stained hosiery to this dry cleaner. The results were so satisfactory and the cost of the processing was so reasonable, that the manufacturer immediately contracted with the dry cleaner to perform this operation for him until such time as the manufacturer's volume of business would justify installation of his own unit.

This naturally suggests the application of dry-cleaning methods to other textile operations where oil and grease are to be removed. The fact that this has not been tried before is due largely to limitations of some of the dry-cleaning solvents which have been employed in the past. These products are somewhat less efficient de-oiling and de-greasing agents than is carbon tetrachloride. They leave fabrics cleaned with them with a characteristic odor which may persist for some time; and most serious of all, since they are either highly inflammable or at least combustible, their use involves some degree of fire hazard. A textile manufacturer obviously would not favor installing in his mill an operation or a process which would raise his insurance rate and increase the danger of loss by fire.

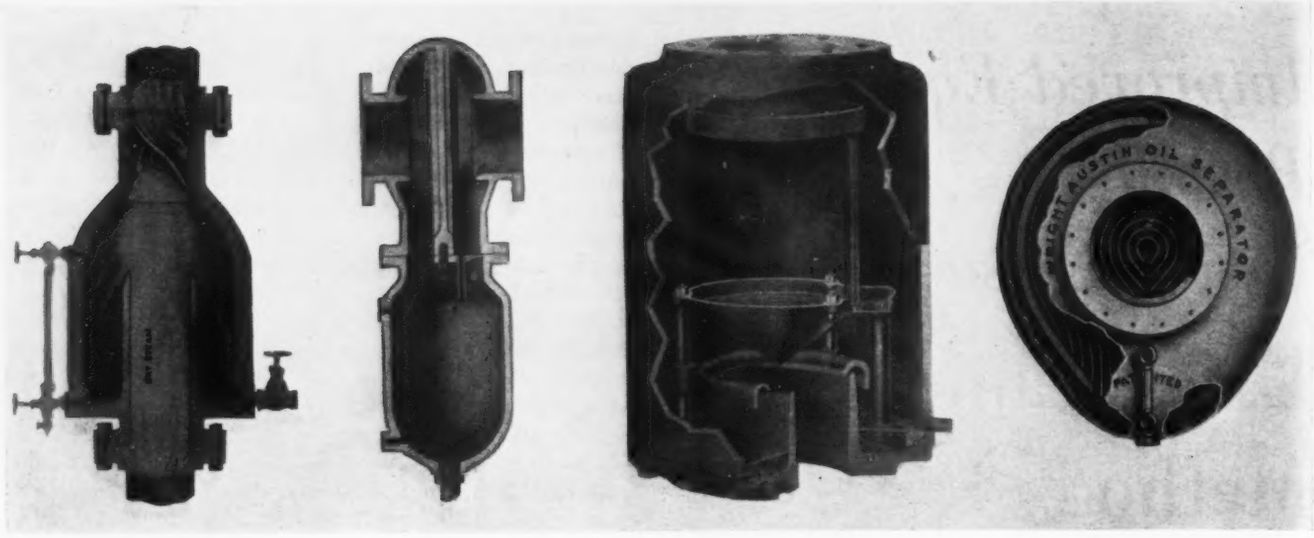
Carbon tetrachloride, as a solvent, is free of these various objections. It has long been known as an excellent and efficient solvent for oils and greases. It is a definite chemical compound which can be prepared in a high degree of purity, and further, is highly volatile. For these reasons, carbon tetrachloride evaporates readily and completely from fabrics cleaned with it and leaves them at once without solvent odor. Carbon tetrachloride is non-inflammable and non-combustible, and its use involves no fire hazard whatever. In addition to these facts, carbon tetrachloride is without harmful action on silk, wool, cotton, viscose, or cellulose acetate.

Important objections that the textile manufacturer may have had to those older dry-cleaning methods, therefore, are overcome by the new carbon-tetrachloride method. This permits the serious consideration of the utilization in textile work of dry-cleaning processes which formerly were out of the question. In fact, European textile mills have been enjoying the advantages of non-flammable solvent cleaning for several years and have even gone so far as to install continuous dry-cleaning apparatus through which the fabric passes after weaving.

The advantage of dry cleaning with non-flammable solvents, is not only in the degree of cleanliness attained, but also, in some instances, in the recovery of valuable oil. The oil taken out of the fabric can in turn be separated from the solvent by the simple process of distilling off the solvent. This distillation is necessary in any case, since to be economical, these solvents must be recovered and used over again. The oil, therefore, is a byproduct of the solvent-recovery operation, and, if desired, can also be used again instead of being wasted as it is in the present wet-washing methods.

The textile man may ask, with some justification, why carbon tetrachloride, with all its obvious advantages, was not applied to dry cleaning years ago. The answer is that with all its good qualities, carbon tetrachloride was much more expensive than the gasoline and naphtha solvents. Price reductions over the past ten years have lessened the difference, but even now there is quite a spread between the cost of a gallon of carbon tetrachloride and a gallon of some of the inflammable solvents. To overcome this handicap, equipment had to be developed which would minimize the solvent loss in cleaning, and which would make possible the recovery of clean solvent from the dirty solvent which had been through the cleaning cycle.

Because of the corrosive action of carbon tetrachloride on the common metals in the presence of free water, this equipment had to be built of metal suitable for use with carbon tetrachloride. It has been the lack of suitable equipment that has really prevented the application of carbon tetrachloride in this field. The recent successful solution of this equipment problem has opened up possibilities in many directions, and the progressive textile manufacturer will do well to consider carefully the application of these up-to-the-minute dry-cleaning methods to his own processes.



Swartwout helicon centrifugal vertical separator

Horizontal-type Cochrane separator

Hoppes ascending-current type of oil eliminator

Horizontal-type Wright-Austin self-cleaning separator

Effect of Lubrication

on Use of Exhaust Steam for Process Heating

◆ *Proper lubrication of power-plant equipment, careful selection of steam-cylinder oils, and use of oil separators are factors to be considered when exhaust steam is employed for process heating in textile mills. The accompanying article, which is reprinted by courtesy of the Texas Co. from a recent issue of* Lubrication, *discusses modern practice in utilizing exhaust steam.*

IN many phases of industrial plant operation, steam, after it has performed its normal service in the development of power, or the operation of pumps and compressors, is used in process or auxiliary heating work. Familiar instances of this occur in textile dyeing operations and in power-plant feed-water heating.

It is important to remember, wherever exhaust steam is to be used either directly or indirectly for heating, that it will virtually always contain a certain amount of cylinder oil. The extent to which this may be a detriment, however, will depend upon the manner in which the heat from the steam is to be utilized. In normal practice such transfer of heat may be regarded as direct or indirect, according to whether steam is led directly into the solutions to be heated, as would prevail in open type feed-water heaters, or whether it is passed through heating coils or drums.

Where steam is passed directly to dye vats, tanks, or open type feed-water heaters, it may carry a certain amount of oil into the liquid to be heated; the oil, in turn, may be passed on to the goods under treatment, or back to the boilers. In either case, this may be a decided detriment. In textile work staining may occur; in boiler-room practice deposits or oily accumulations on the water side of the tubes may tend to reduce the rate of heat transfer. Where steam is used in an indirect manner for heating processes, however, one need only be concerned with accumulations of oil deposits within the heating surfaces, which would, of course, have the same effect as on boiler tubes; i.e., reduction in the rate of heat transfer.

It is obvious, therefore, that where exhaust steam is to be used in this manner, more attention should be given to steam cylinder lubrication. It may be stated that very frequently the steam cylinders of engines, pumps, or compressors are over-lubricated. In general, however, this will not be apparent until the machinery is taken down for overhaul. Normally such a condition may prevail for a considerable length of time before overhaul will be esesntial; and yet all this time an excess of oil will be carried over by the exhaust steam, as a potential cause of trouble.

Dyehouse Operations

In the dyeing of textile yarns or fabrics the utmost

care must be taken to preserve the purity of the dyeing solutions, as well as the water used for washing. This will be especially applicable to skein-dyeing operations where the yarn is dyed prior to weaving. In such practice, the woven goods often are not subjected to any further washing, final treatment being confined to shrinking, ironing, etc., according to the nature of the product. The presence of lubricating oil, must be prevented, therefore, wherever possible, for it has been found that it impairs the process of dyeing, causing uneven spreading of certain dyes and, frequently streaks in the finished goods. As a result, in view of the practice of using exhaust steam for direct heating of dye liquors and wash waters in certain dyehouses, the detriments which may accrue from the use of an excess of cylinder oil in pumps or engines must be realized.

Where exhaust steam is to be used in this manner, oil separators can be installed. In general they can be depended upon to be reliable in removing any cylinder oil which might be detrimental to products such as silk or rayon. Where a separator is not used, however, it is often customary to sacrifice lubricating ability to some extent, although indirect heating would be the most positive method of preventing the possibility of oil streaks or stains. On the other hand, indirect heating would involve a more expensive layout of pipe coils in the various tanks.

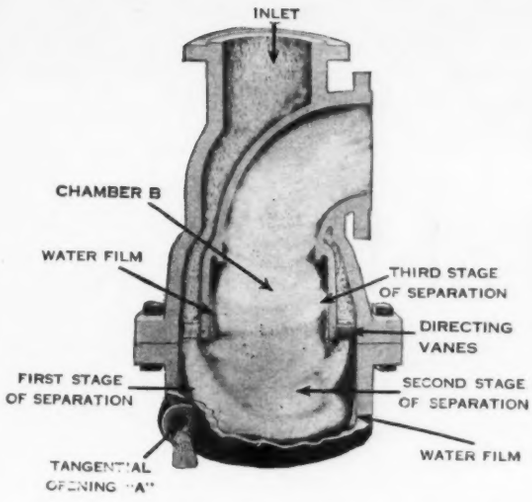
Effect on Boiler Operations

Oil in the form of fine emulsions in a boiler combines with the boiler compounds to cause foaming, or reaction with the boiler-water impurities to produce a coating over the tubes and fire surfaces. This coating seems to form more readily over relatively clean tubes than over dirty ones. A very thin layer of oily sludge over a tube surface will so insulate it that there is a large loss in heat efficiency.

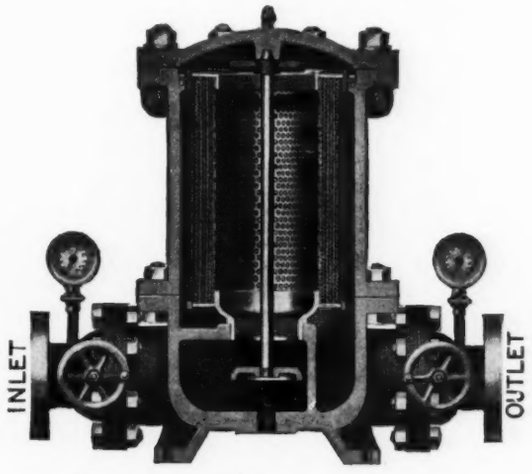
Likewise, in this event the rise in temperature of the metal may be so excessive as to cause burning out or explosion of the boiler tubes.

The remarks of the Elliot Company are particularly interesting in this regard:

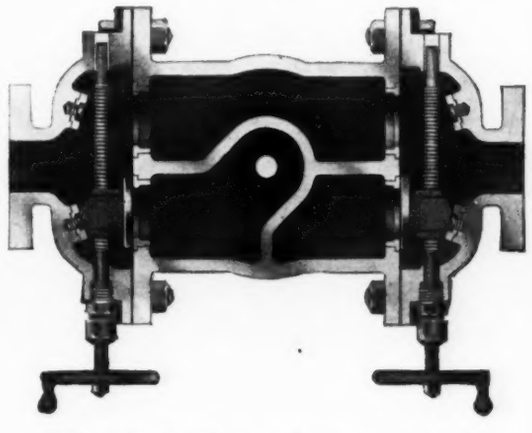
"Oil can perhaps do more damage in proportion to its bulk than any other substance that is likely to be carried into the boiler with the feed water. In the boiler, oil or grease tends to form a film or coating over the entire inner surface; and this film is a highly efficient heat insulator, separating the water from the heating surfaces, causing dangerous overheating of tubes and sheets, and lowering the rate of heat transmission through the tubes. If only the slightest amount of oil and grease is present in the feed water when it is injected into the boiler, a distinct falling off in efficiency can be noted. Oil and grease also combine with scale-forming material to form a scale which is very hard to remove and, of course, doubly detrimental to both operating efficiency and safety. Oil in the boiler is sure to cause repair bills amounting to a great deal more than the cost of keeping the oil out of the boiler in the first place."



Hagan oil separator with three stages of centrifugal separation



Lagonda multiple filter and grease extractor—Elliot Co.



Elliot single filter and grease extractor

Steam-Cylinder Oils

In view of the foregoing, it is obviously important to study those factors in steam-cylinder lubrication which may foster retention of oil by the exhaust.

As a general rule, it is felt that these will involve the rate of oil feed, the type of engine, and the amount of compound used. The former can, of course, be controlled by the operator; in an existing plant, however, the type of engine, pump, or compressor is fixed. Compounding in turn is a refinery process; plant operators, on the other hand, by judicious study of cylinder-oil characteristics, can obtain such products with varied amounts of a number of fixed oil compounds, according to their plant and engine requirements. The use to which the exhaust steam is to be put is of decided importance in connection with the latter.

The purpose of compounding is to improve the adhesiveness of steam-cylinder lubricants. It is, therefore, a function of the moisture content of the steam. From the viewpoint of actual composition of a cylinder oil, the question of moisture in the steam is the most important factor involved.

Steam will always contain a certain percentage of moisture unless it is superheated to a sufficient extent to counteract any line and cylinder condensation which may be caused by the cooling effect of the piping or cylinder walls and the expenditure of heat by the expansion stroke.

(to be continued)

Overseers' Round-Table

THIS department offers a new subject for discussion each week and gives readers' comments on problems introduced during previous weeks. The subject which was opened four weeks ago is closed this week and a summary of contributed ideas is given on opposite page

◆

Chewing Tobacco

Editor, Overseers' Round-Table:

SHOULD TOBACCO chewing in the mills be regulated or forbidden? Regulation is usually unsatisfactory, because, in order to have desirable results, each chewer would require an overseer to see that the chewing was done according to regulations. Prohibition is generally distasteful because a grown man doesn't like any paternalistic system whose proboscis sniffs into the details of a man's life to tell him what not to do. But there could be a control of results. That is, while the mill heads may not dictate what the mill hands should do with their mouth, they may rightly demand that no spitting be done anywhere in the mill. Let the chewers use their handkerchiefs as all gentlemen are expected to do when they need to spit. This would save "the floors, the newly painted walls, the tickets, the reports, and the stock"; and would naturally discourage some from chewing. Then the rest, who naturally would keep on chewing under no matter what restrictions, should be taken care of by a well-planned process of education. The workmen should be enlightened; should be given a reason or two for not chewing—stained teeth, impaired taste, wrecked glands, foggy brains, distasteful odor. There is nothing like a clean individual no matter what his color. And, what is more, a clean individual produces clean work.

In two sentences: Forbid spitting. Educate.

DONATO INTERNOSCIA.

Editor, Overseers' Round-Table:

A TEXTILE company should certainly keep clean departments. This is essential not only in keeping the goods clean, but also because stockholders and all who are interested in the organization have more pride in a clean, orderly mill.

In spite of this desire for cleanliness some workers have strong habits of chewing tobacco and are not careful of the results. The operatives chew for many plausible reasons; a card room man chews to keep lint out of his throat, a spinner chews for the same reason, a weaver chews to steady his nerves, and so on through the line of mill operations. It would be a crime to deprive these laborers of a habit which apparently helps them to do a better type of work.

The most logical thing is for the employer to compromise with the worker and allow him to chew, but with certain restrictions. A feasible plan is to provide each worker who chews with a pasteboard cuspidor, filled with sand or sawdust, located away from a corner, post, or machine. Let the operative chew as much as he wants as long as he does not harm the floor, machine or goods. If he should forget to be sanitary the overseer should take enough out of the pay to cover the cost of having the stain removed. The janitor would take care of the cuspidors at regular intervals.

J. E. G.

Editor, Overseers' Round-Table:

THE USE of tobacco in the mill cannot be completely abolished, therefore chewing should be regulated by prohibiting the use of tobacco.

The average chewer will have his little chew regardless of rules or regulations, but—if the use of tobacco is prohibited he will "slip" and have his chew, being very careful not to be caught or seen. Naturally, he will not spit where it may be seen, for he feels that the finger of suspicion would eventually point in his direction. In other words, people

Pete Brings up a

"I AM very glad," Superintendent Chase addressed the overseers, "to turn the chair over to Pete today as he has a subject for discussion. What is it, Pete?"

"I must admit," Pete started off, "that this is a pretty tough problem because it is one of those intangible things that it is difficult to reduce to any rules. However, I think that it will be well worth our while if we give some thought to the problem of promoting employees in our departments. What I mean is that when anyone talks about promotion it almost always refers to overseers or to those in authority. You speak of a certain overseer and say that he has ability and will go far, but how often do you speak of one of the operatives in the same way? Naturally, some of the operatives will get ahead anyway, but while they remain operatives no one pays much attention to their possibilities. Do you men think that some plan could be devised whereby the operatives would be made to understand that the mill was interested in their possibilities and would promote those with ability whenever possible?"

"I agree," Joe spoke up, "that you hear very little talk about promotion of operatives and I think the reason for this is that there is really nothing that can be done. In the first place, with a large number of operatives there is actually only a small chance of any single operative getting promoted. In the second place, anyone with outstanding ability will get ahead without anyone worrying. I think that Pete has brought up one of those things that sound all right in theory, but don't mean a thing in practice."

"I hate to admit it," Bill smiled, "but I actually agree with Pete. When an intelligent employee comes to the plant you put him to work. He makes good on the job and you're satisfied so you let it go

Difficult Problem

at that. Sometime later you may wonder why he leaves. Wouldn't it be much better if you showed an interest in this operative, gave him a bit of advice now and then and let him know that you were watching him and would consider him if there was a chance for advancement? You could apply the same thing to all the operatives who have any hope of getting ahead. I believe that if the workers know that you are always watching them and considering them for advancement they will put more energy and thinking into the work. As Pete says, there are no set rules, but I'll bet if we gave more thought to this problem we could reduce labor turnover and even attract more good workers because they'd want to work in a mill which helped them to get ahead and gave everyone a fair chance. It's mostly a question of the overseer taking the proper attitude."

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Do *you* believe that it is possible and practical to give the operatives the feeling that they are always being watched and considered for promotion?

Overseers and others are invited to discuss this and other questions brought up in the super's talks. Letters accepted and published will be paid for without regard to length. Brevity is desirable.

would continue to use tobacco, but they would always be discreet.

No man needs tobacco in order to produce. The open privilege of using tobacco in the mill necessitates the use of cuspidors. And a cuspidor is an ugly, nasty looking thing.

Prohibit the use of tobacco in the mill and it will automatically regulate itself. This is true because it has proven successful in a southern plant where chewing was in its highest stage. The rule is now in effect. People are still using their tobacco, but can the super catch them? No.

TRESTER B. FARMER, Nick-A-Jack Hosiery Mills.

Daily Meetings of Overseers

Editor, Overseers' Round-Table:

VOTE WITH neither. Both Hank and Bill are wrong. These daily meetings on company time degenerate into sewing circle chatter and eventually destroy themselves.

While managing executive of a spun silk division, with the help of fifteen minute planning and production control meetings two or three times a week after working hours, my overseers and superintendents consistently produced from 3,500 to 4,650 lb. of ply yarns per week from mills scheduled by competent management engineers as having a capacity of 2,700 lb. per week. With the superintendent of the primary operation reporting for his four departments, it was comparatively simple for each of the following overseers to plan as far as three weeks ahead.

Meetings after mill or shop hours will necessarily be brief and competent management can secure all material aid needed for the supts. and overseers. The main proviso is that each come prepared to give a comprehensive report of his department as of quitting time that day and the probable flexibility of it for the next week. Discussions were restricted to the particular items the mills had to ship during the next week or two.

E. E. GAGNON.

Editor, Overseers' Round-Table:

I AM very much in favor of Bill's argument against daily meetings for overseers. I have known of one or two mills that have tried daily meetings and soon found them a failure. If the help know the overseer is out of the department for at least an hour, or probably more, it seems just human for at least 50% of them to lag on the job.

I have had a lot of experience with overseers' meetings, and second hands' tricks, and what the help in general will do, and I, for one, vote against overseers' meetings. If the super has his daily reports up to date, looks them over carefully and, on his daily trips through the plant, has his eyes open and is not afraid to tell his overseers their mistakes, he can get along without meetings.

W. D. CRAWFORD.

Editor, Overseers' Round-Table:

IT IS difficult to conceive one single valid argument against the practicality of daily overseers' meetings. I have no doubt that it will be readily conceded that the weekly meetings have been not only mutually beneficial but also productive of good. If so, consistency itself demands an affirmative vote on daily meetings. Bill's premonition of sport topics predominating applies in equal force to weekly meetings, but no such digression was ever evidenced in any report so far made available to the writer.

The time objection is also pretty shallow and lacks substantiation. The short morning period devoted to the discussion of ways and means of improving operations and production cannot be termed wasted time. An overseer isn't a mechanical figurehead, but is really the "brains" of his department; the routine work being under the supervision of the assistant overseer. Consequently, there is no justification for the belief that his absence for a short time each morning would affect adversely the efficiency or productivity of his department.

R. A. C. SCOTT.

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Summary of Discussion on Scrubbing

By a majority in the proportion of four to one, contributors voted against daily meetings of overseers. The principal objection to such meetings was said to be the time wasted, with the let-down of operatives when the overseer was absent as the second largest fault. Those voting in favor of daily meetings stated that they could be kept short and much good in planning production would come from such daily contact. Several letters believed that meeting after regular hours would insure short and snappy sessions.

Follow-Through on Wool Week and Quiet Optimism Mark Boston Wool Trade Meeting

BY UNANIMOUS vote of those present, the Boston Wool Trade Association, at its annual meeting, Nov. 17, favored a campaign to raise money for the purpose of cashing in on National Wool Week by further advertising through radio broadcasts. Other high-lights of the meeting include the election of Robert L. Turnbull, of Dewey, Gould & Co., as president; his optimistic statement on the wool trade; and the attack made on the Federal Farm Board by William S. Febiger, retiring president.

After Harry J. Blake, who headed the trade activities in connection with National Wool Week in the Boston district, outlined the amount of publicity secured and retailer reactions, discussion arose on the possibility of carrying on the work in such a way that advantage could be taken of the large original impetus. The technique and possibilities of broadcasting were touched upon by a representative of the Yankee network and several members spoke in favor of the plan. There followed suggestions that plans be made to secure cooperation from manufacturers and others interested, but others pointed out that the best thing to do was for the wool trade to go ahead of itself and, by its work, attract manufacturer interest as well as serve as bellwether for a possible continuing promotion of wool on a national scale.

Robert L. Studley put a motion to the effect that it was the sense of the meeting that a campaign be started to raise money for broadcasting. It was tacitly understood that an investigation be made before any definite plans were approved and the motion was unanimously passed. With this expression of approval on the part of the membership, it is expected that the executive committee will look into the details and devise definite plans. Members seemed to feel that the beginning would have to be on a modest scale, but that the important thing was to get started before it was too late.

After lunch the meeting was opened by reading the secretary-treasurer's report and committee reports. The following officers and committees were elected: President, Robert L. Turnbull; vice-president, Edmund F. Leland; secretary and treasurer, F. Nathaniel Perkins; executive committee, Harry J. Blake, Orville W. Forte, Cheney E. Cook, Durham Jones, Percy E. Sheldon; arbitration committee, chairman, Ralph E. Dupee, Ralph E. Durgin, H. Clyde Moore, Lawrence Ilfeld, William H. Wright. The nominating committee consisted of Chairman William G. Fallon, Cheney E. Cook, Norman E. Dupee, H. Clyde Moore and Robert L. Studley.

In his farewell address the retiring president, William S. Febiger, told of the importance of wool merchants in biblical times, of the honor and esteem in which the trade was held in the 13th century and, bringing his remarks down to the present, deplored the passing of several old wool houses which, he claimed, was due to Farm Board action. Mr. Febiger said, in part:

For the last two years about one-third of the wool clip of the United States has been partially financed by Government funds (taxpayers' money). This vast amount of wool was concentrated under one control which theoretically might have made for strength, but actually resulted in weakness. Time has proven that the Farm Board's efforts have been unfortunate, not only for the private handler of agricultural products, but also for the producer, and that the sooner Government funds cease being used for the control of usual commerce, the better it will be for all.

We have no brief against the Farm Board itself, for it has been trying to do its best under the agricultural marketing act. The blunder is in the act itself, which started action harmful even to those whom it was expected to help.

We all want to aid the farmer, and are willing to pay our share to do so, but, actuated by the agricultural marketing act, the Farm Board has not only made us pay, but has made the farmer pay also.

For what good is such legislation?

For what reason should the taxpayers' money be used by Government agencies in any business in competition with private capital that is engaged in the same business?

Mr. Legge, former chairman of the Farm Board, in his address before the Boston Chamber of Commerce on Oct. 30, 1930, remarked "But some of you say, 'this is using taxpayers' money in competition with private capital which has heretofore been engaged in this business.' Class legislation—well, what about it?" My impression is that at the polls next November the voters will give their answer to Mr. Legge's "What about it?"

Succeeding Mr. Febiger in the chair Robert L. Turnbull, the new president, spoke of the good position of the trade during the depression and credited better management and good merchandising. His remarks follow:

Our trade is passing quite comfortably through a year of unequaled depression, and I believe this is largely due to better management and good merchandising. The firmest foundation of the entire industry has been the wool market.

It is to our credit that during the last few months, in the face of a dull goods market and drastic price cutting in New York, the price of wool has not only held firm but it has actually advanced. The New York goods market is, therefore, no longer a controlling factor in the price of wool, but the stability of the wool market will definitely benefit the goods market in the near future.

New York seems slow to realize that the recent wool stock report reveals the fact that here is one raw material of which there is no surplus.

Robert W. Turnbull, elected president, Boston Wool Trade Association

Throughout the most critical period the world has known the price of wool has been so well maintained it is not difficult to imagine what will happen as conditions continue to improve. Is it not significant that at this time we enjoy an excellent demand for wool at advanced prices while the goods market remains inactive?

Our association was fortunate that in Mr. Febiger we had a president who gave so generously almost his entire time for our interest.

Last week others also dropped their personal interests to work for us all. Many made donations to Wool Week, but had it not been for the actual hard work of a few of our members, I can assure you Wool Week would have been a decided flop in Boston and New England. Harry Blake was a tireless worker. He was at it day and night, and I am sure his experiences must have created ideas which should be of interest to us all.

▸ Bimbo Club Holds Golf Tournament

More than 60 members of the Bimbo Club, a Philadelphia textile men's organization, took part in their sixth annual golf tournament held at the Manufacturers Country Club, Oreland, Pa., Wednesday, Nov. 11. Thos. A. Oliver, of the Oliver Knitting Co., captured the 1931 championship, with a gross score of 86 and net of 71. Patrick Hannigan tied with Mr. Oliver, but lost the toss. James Hulton, Jr., of the Hulton Dyeing Co., Inc., won the special prize for the best gross, with 88; James Oliver took third prize with a gross of 94 and net of 72, and John Friedrich, Jr., was fourth with a gross of 99 and net of 72. Fred Scholler, of Scholler Bros., president of the club, announced the match was for the benefit of the unemployed and a subscription was made at the dinner following the tournament for this fund.

Jack Card Pages a Psychologist

Editor, TEXTILE WORLD:

Textile manufacturers, guilty of many errors of business judgment, are not to be blamed for declines in raw material prices. To a large extent, such movements are beyond their control.

But what bothers me is the "manufacturers' margin" curve which has been falling steadily in recent months, despite a fairly well sustained demand for fabrics, and a continued healthy balance between production and shipments.

Wheat goes up on "predictions" of French buying; security prices go up on war rumors; textile manufacturers' chances for a decent profit go down, in the face of an existing, not a speculative, call for their goods.

I am not enough of an economist to explain this phenomenon. As a matter, of fact, that isn't important; I think a psychologist is needed.

Whether the textile psychosis is a superiority complex manifesting itself inversely; whether it is an inferiority complex manifesting itself directly; or whether it is just a plain mixture of stupidity and cowardice, is not for me, as a layman, to say.

But I can't help thinking.

JACK CARD.

▸ Reds Important In Spring Wool Colors

New renditions of red, including subtle terra cotta and rust shades, as well as vivid scarlet and geranium types, figure prominently in the range of 50 colors which will appear on the Spring 1932 Woolen Card to be issued shortly by the Textile Color Card Association. Advance swatches of the new shades have just been sent out to members in the woolen industry, it is announced by Margaret Hayden Rorke, managing director.

Swope Says Experiments with His Plan Would Correct Weaknesses

BEFORE the Academy of Political Science at the Hotel Astor in New York, Friday night of last week, Gerard Swope, president of the General Electric Co., made answer to some of the criticisms of this plan for the mitigation of industrial depressions, which he originally presented in an address before the National Electrical Manufacturers' Association on Sept. 16. Mr. Swope emphasized the "voluntary action" element in his plan, as opposed to compulsion, and re-affirmed his belief that stabilization of industry, particularly of employment, is possible by the procedure he has suggested, with full protection of the public interest.

Whether his plan is meritorious or not, he pointed out, the experience gained in endeavoring to put it into practice would of itself tend to correct its weaknesses. To believe, as some do, that industry simply cannot be stabilized, Mr. Swope asserted, is to adopt what Senator La Follette has termed the "counsel of despair", which would be a negation of all effort toward progress.

Discussing the dissemination by trade associations of knowledge regarding trade practices and ethics, and the standardization of products, Mr. Swope quoted an opinion of the Supreme Court, handed down in 1925, which held that "the natural effect of the acquisition of wider and and more scientific knowledge of business," could hardly be deemed a restraint of commerce, or at least not an unreasonable restraint, "or in any respect unlawful."

Mr. Swope added that he believed American industry has long since passed the point where trade associations would curtail production, causing increases in prices to the public, a fear expressed by some people. "What the industry would endeavor to do," he said, "would be to prevent over-production, and would regard as an unfair competitor any member of such trade association who, knowing the consuming power of the public and the stocks on hand in the possession of all members of the association, nevertheless built up a large inventory, which later must be sold at reduced prices, quite regardless of cost. Such practices are unfair to the competitors themselves, and highly unfair to the labor employed; and such prices below cost for a brief period are of no lasting benefit to the consuming public."

Modification of the Sherman anti-trust law along the line recommended by the American Bar Association to remove the criminal aspects of the law and to allow companies to make agreements which would be filed with the Federal Trade Commission and the Department of Justice was one method suggested by Mr. Swope for encouraging companies to participate in the plan by joining their respective trade associations. Another method which he suggested was to allow participating companies to deduct from their federal taxes the sums which they contribute to employee welfare funds.

To those critics who expressed the belief that his plan would mean in reality putting the Government in business, Mr. Swope made answer by pointing out that throughout the plan he had advocated "that the initiative be taken by the trade associations and not by the Government." The government supervisory body, he declared, would act as a referee or umpire to interpret unfair competition between members, or if necessary to protect the welfare of the public by its interpretation of agreements filed with the Federal Trade Commission or its study of trends.

Mr. Swope reiterated that he considered the stabilization of employment, meaning assurance of employment with unemployment insurance if necessary, to be the plan's most important feature.

"The result of taxing industry for a portion of the cost," he said, "will be to put a premium on industry's finding ways of stabilizing employment."

"An important factor, which I think is basic, is that the cost of the product will include these items and will therefore be paid for by the users of the articles and not in general by members of the community through taxation."

Mr. Swope added that even if industry itself falls short of "an ideal accomplishment," more progress will be made and it will be better done and cost less "than if the Government, either State of Federal, endeavors to do it."

One of the many windows at Filene's, Boston, decorated for National Wool Week. The display was awarded first prize

▸ Postpone Meeting of S.T.A. Weavers

The fall meeting of the Weavers' Section of the Southern Textile Association, which was originally scheduled for Dec. 4 at Greenville, S. C., has been postponed because of a conflict in dates with the Pinehurst convention of The Cotton Manufacturers Association of North Carolina.

NEWS about MEN

Saradjoglou Shukri Bey, representing the Turkish government, and a member of the Grand National Assembly, having been duly received at Washington, is visiting a number of important mills, finishing plants and textile machinery companies. **Samuel C. Lamport,** of Lamport Mfg. Supply Co., New York, is heading the entertainment group on the tour of inspection. **Julian Gillespie,** head of the U. S. Commerce Department's office in Istanboul, is a member of the party as well as **Chester Allen,** of Lockwood Greene Engineers, Inc., New York. Among the places visited were the Lawton Mills Corp., Plainfield, Conn., where **William S. Staples,** treasurer, and **W. H. Shelley,** superintendent, were hosts; Powdrell & Alexander, Danielson, Conn., and the Aspinook Co., Jewett City, Conn., where **Philip Johnson,** president and treasurer, was host.

Rufus W. Scott, chairman of the executive committee of Tubize Chatillon Corp., New York, with plants at Hopewell, Va., and Rome, Ga., returned last Monday night from a short trip to Europe.

W. D. Anderson, president, Bibb Mfg. Co., Macon, Ga., addressed the National Fertilizer Association at its seventh annual southern convention in Atlanta, Ga., Nov. 10, on the subject, "What Price Socialism?"

W. H. Hightower, president, Thomaston (Ga.) Cotton Mills, has been reelected a director of the Georgia Peach Growers' Exchange.

Richard P. Borden, was reelected president of the Richard Borden Mfg. Co., Fall River, Mass., and **Vernon L. Faulkner,** treasurer and superintendent. **Richard P. Borden, Allen B. Clarke,** and **Clifford M. Gardner** were reelected directors. **William F. McCoy** was made a director of the company for the first time.

Charles A. Hardy has resigned as purchasing agent of the American Woolen Co., New York, and will be succeeded by **Percy E. Wardwell,** who has been connected with the company for more than 25 years in various executive capacities. This change is effective Dec. 1. Mr. Hardy has been connected with the American Woolen Co. for 26 years as assistant treasurer, purchasing agent of the Wood Worsted Mill, and purchasing agent of the entire company. He will become associated with the Henry K. Barnes Co. of Boston, Mass., as treasurer. That company is tanner and manufacturer of leather belting, comb aprons, gill box aprons, and other leather specialties for the textile industry. Main offices are in Boston, Mass., and the tannery and factory in Salem, Mass. They have been established since 1876. Mr. Hardy brings to his new connection an asset of experience and extensive contact throughout the textile trade.

John H. Cheatham, now active in management of mills whose combined equipment is 238,000 spindles and 6,000 looms.

D. D. Little and **Hugh F. Little** were elected to their former offices as president-treasurer and assistant treasurer, respectively, of the American Spinning Co., Greenville, S. C. **L. Y. Smith** was chosen secretary to succeed the late **W. B. Boyd,** and **Mrs. Lola D. Johnson** was elected assistant secretary and cashier. Members of the board of directors present were: **J. E. Sirrine, H. J. Haynsworth, Morris Hadley Lott, B. Malon, F. S. Gedney, D. D. Little** and **Hugh F. Little.**

Stuart W. Cramer, president of Cramerton (N. C.) Mills, Inc., without any voluntary assistance on his part, is being considered by Republican leaders as a likely candidate for Governor of North Carolina. He delivered the principal address at the convention of the Coastal Coordination Association of the two Carolinas held at Beaufort, S. C., last week.

W. E. Winchester, a vice-president of Deering, Milliken & Co., New York, has been elected president of Judson Mills, Greenville, S. C., succeeding **G. H. Milliken.** Mr. Winchester was made a director of the Gainesville (Ga.) Cotton Mills last May.

Theodore Belanger, president of Champlain Spinners, Inc., Whitehall, N. Y., is head of the unemployment relief committee in that district.

Arthur B. Van Gelder, president of the Van Gelder Yarn Co., New York, and president of the Wilbur Cotton Mills, Inc., Troy, N. C., spent last week visiting **Milton Ensor,** southern representative and manager of the above companies.

John H. Cheatham has been elected vice-president of Thomaston (Ga.) Cotton Mills, Peerless Cotton Mills, Thomaston Bleachery and Griffin (Ga.) Mills, Inc., as reported in last week's issue of TEXTILE WORLD. Mr. Cheatham will continue as president and treasurer of the Georgia-Kincaid Mills, Rushton Cotton Mills, and the Lowell Bleachery-South, of Griffin, and The Hartwell (Ga.) Mills. He is now actively engaged in the management of mills with combined equipment of 238,000 spindles and approximately 6,000 looms.

Arthur W. Johnson, connected with the knitted apparel trade for more than 20 years, has become a director and vice-president of the Van Dyke Knitting Co., Milwaukee, Wis. Last June Mr. John-

Textile Calendar

American Society of Mechanical Engineers, Textile Division, Annual Meeting, Engineers Club, New York, Dec. 2, 1931. (Also annual meeting of parent organization.)

American Association of Textile Chemists and Colorists, Annual Meeting, Hotel Statler, Boston, Mass., Dec. 4 and 5, 1931.

Cotton Manufacturers Association of North Carolina, Fall Meeting, Carolina Hotel, Pinehurst, N. C., Dec. 4 and 5, 1931.

Textile Forum, N.A.C.M., for overseers of spinning, Chamber of Commerce Bldg., Boston, Mass., Dec. 10, 1931.

Wool Blanket Manufacturers, Quarterly meeting, New York, Jan. 14, 1932.

Textile Forum, N.A.C.M., for master mechanics, Chamber of Commerce Bldg., Boston, Mass., Jan. 14, 1932.

Textile Forum, N.A.C.M., for overseers of warp preparation and weaving, Chamber of Commerce Bldg., Boston, Mass., Feb. 11, 1932.

Textile Forum, N.A.C.M., for overseers of dyeing, bleaching and cloth room, Chamber of Commerce Bldg., Boston, Mass., Mar. 10, 1932.

National Association of Hosiery and Underwear Manufacturers, Annual Meeting, Commercial Museum, Philadelphia, Pa., April 14, 1932.

Knitting Arts Exhibition, 28th Annual Show, Commercial Museum, Philadelphia, April 11 to 15, 1932.

Textile Forum, N.A.C.M., General Meeting for agents and superintendents, Chamber of Commerce Bldg., Boston, Mass., April or May, 1932. (Date to be set later.)

Second National Cotton Week, nation-wide promotional campaign, May 16 to 21, 1932.

Southern Textile Exposition, Textile Hall, Greenville, S. C., Oct. 17 to 32, 1932.

son resigned as vice-president of the Bradley Knitting Co., Delavan, Wis., and as general manager of the National Knitting Co., Milwaukee. He was also treasurer and manager of the Miriam Gross Co., Milwaukee, makers of women's knit dresses, at one time.

Frank G. Murch, former president and treasurer of International Worsted Mills, Methuen, Mass., has become connected with Farr Alpaca Co., Holyoke, Mass., in its tropical worsted department. The International company specialized in this type of goods.

Eugene H. Timanus has been made treasurer of the Whitman Mills, New Bedford, Mass., and will succeed **George W. Pope.** He will continue to be treasurer of the Pemaquid Mills, New Bedford. The Whitman company has been closed for some time and the tax title to the property was recently acquired by the city.

James O. Thompson, Jr., who on Jan. 1 will have completed 21 years of service as secretary of the board of trustees of the New Bedford (Mass.) Textile School, has tendered his resignation effective on that date. He will continue as a member of the board of trustees. Mr. Thompson is agent of the New Bedford Cotton Mills. His successor at the school has not been named.

N. M. Cranford, who resigned as treasurer of the Asheboro (N. C.) Hosiery Mills, has become manager of the Keystone Finishing Mills, Asheboro, N. C.

W. B. Cole, John W. Porter, and **I. B. Covington** are three new directors elected at the annual meeting of the Pee Dee Mills, Rockingham, S. C.

Vassar Woolley, Jr., of Seydel-Woolley Co., Atlanta, Ga., talked to the senior class of Clemson College (S. C.) Textile School recently, on the subject of "Sizing Compounds and Their Application."

Elected McGraw-Hill Vice-President

DR. H. C. PARMELEE, editorial director of the McGraw-Hill Publishing Co., has been elected a vice-president of the company. This is not only a tribute to Dr. Parmelee as an individual but is a further indication of the importance attached by the company to its editorial activities. Born in Omaha, Neb., Dec. 4, 1874, Dr. Parmelee has had a distinguished career as a chemist, an educator and an editor. His educational experience included the presidency of the Colorado School of Mines. His editorial service with the McGraw-Hill company has covered 20 years. Prior to his appointment as editorial director, he was editor of *Chemical and Metallurgical Engineering.*

Luther H. Hodges, of the Carolina Cotton & Woolen Mills Co., Spray, N. C., was recently elected vice-chairman of the North Carolina State Commission on Adult Illiteracy.

W. C. Bobo, general superintendent of the Gossett Mills, Anderson, S. C., has resigned. He has made no announcement of his future plans. Mr. Bobo was general superintendent of the Judson Mills, Greenville, S. C., for a number of years.

Frank A. Brady, superintendent of the Stevens Mfg. Co., Fall River, Mass., has resigned. Mr. Brady worked for the company for 30 years. He is planning to take a short rest before participating in any new activity.

George F. Haigh, formerly superintendent of the Annevar plant of the Cleveland Worsted Co., Ravenna, O., has taken a position as superintendent with the National & Providence Mills of the American Woolen Co., Providence, R. I. Before going to Ravenna, Mr. Haigh was designer and assistant superintendent of the Puritan Mills, Plymouth, Mass., for many years.

John E. Wood, who was superintendent of weaving at the Whitman Mills, New Bedford, Mass., previous to their closing, has a similar position with the Ponemah Mills, Taftville, Conn. For a number of years he was superintendent of weaving at Gosnold Mills.

Burnet Valentine, in charge of the converting department of Pepperell Mfg. Co., Biddeford, Me., sailed Nov. 5 for Europe on the "Lafayette." **J. R. Lake,** head of the Pepperell gray goods department, returned from his honeymoon, on the "Belgenland" last week.

French Campbell, Jr., Providence Bldg., Chattanooga, Tenn., has been appointed sales representative for Boger & Crawford Co., Philadelphia, spinners and mercerizers, for Tennessee, Kentucky, Alabama and Georgia.

Carl Tapper has resigned his position as overseer of dyeing at the Calumet mills of the Stanley Woolen Co., Uxbridge, Mass., to accept a similar place in a mill in New London, Conn. Mr. Tapper is a former president of the National Association of Textile Dyers and Finishers.

Abel Buckley, recently of Charlton City, Mass., has accepted a position as loomfixer at the Rochdale (Mass.) Mills of the American Woolen Co.

Richard A. Gynne, who was overseer of dressing at the Beoli Mills, of the American Woolen Co., Fitchburg, Mass., has a similar position with the Wakefield (R. I.) Textile Co.

Richard Hopkins is now overseer of dyeing at the Hodges Finishing Co., East Dedham, Mass. He succeeds **Edward F. Gannon.**

Obituary

Gordon Bunker

Gordon Bunker, contact man with Bliss, Fabyan & Co., selling agents, New York, died suddenly this week following an operation at the Newton (Mass.) Hospital. He was born in 1880, the son of a major in the Union army, and descended from early American settlers who came to the colonies in the middle of the 17th century. When he was 17 years old he went to work in the Boston offices of Catlin & Co., selling agent at that time for the Atlantic Mills. When these plants went over to Pacific Mills, Mr. Bunker left the company and joined Wellington, Sears & Co. For that organization he took charge of the New England Bunting Co., at Lowell, Mass. While in Lowell he acquired a technical education in cotton spinning, weaving and designing. After six years with the New England Bunting Co., he entered the yarn selling trade, representing Tolar & Hart of North Carolina. Subsequently, he was associated with Tatum, Pinkham & Greey, for whom he organized a department selling cotton yarns and gray goods. His next association was with W. H. Langley & Co. On July 5, 1927, he joined Bliss, Fabyan & Co. Mr. Bunker is survived by his wife and four children. He was a member of the Baltusrol, Braeburn, and Highland golf clubs.

H. LeRoy Valentine

H. LeRoy Valentine, president of the Vogue Knitting Mills, Womelsdorf, Pa., died suddenly last week, at the age of 53 years. He was prominent in the town in business and banking circles.

Joseph G. Ray

Joseph G. Ray, president of the Ray Cotton Co., Woonsocket, R. I., until he retired a number of years ago, died Nov. 10 at his home in Wollaston, Mass. Mr. Ray was the son of Edgar K. Ray, founder of the Ray Cotton Co., and of the street railway system in Woonsocket. He was identified with several banks and industrial concerns in Woonsocket. He came from a family who were pioneer textile manufacturers in Franklin, Mass.

N. S. Turner

N. S. Turner, president and treasurer, Covington (Ga.) Mills, died suddenly at his home in Covington Nov. 8. Mr. Turner, who was 58 years of age, was prominent in many business and civic enterprises.

James A. Austin

James A. Austin, agent for the Arden mill of the American Woolen Co., Fitchburg, Mass., for 14 years, being succeeded by Percy L. Schutt, the present agent, about five years ago, died in a Syracuse hospital, on Nov. 12, aged 43 years. He was a native of Fitchburg, and leaves a widow. The funeral was in Fulton, N. Y., and the burial in Fitchburg.

Oliver R. Whitby

Oliver R. Whitby, retired secretary-treasurer of Penmans, Ltd., Paris, Ont., Canada, died at his home in his 82nd year. E. L. Whitby, one of his five sons, owns and operates the Whitby Braid & Edging Co., Woodstock, Ont.

NEWS about MILLS

Cotton

Pilgrim Mills, King Philip division of **Berkshire Fine Spinning Associates, Inc.**, Fall River, Mass., were still closed this week owing to the stagnation in the cloth market. Other mills in Fall River, while operating have shut down considerably.

Kilburn Mill, New Bedford, Mass. Stockholders of the company will decide at the annual meeting Nov. 23, whether or not the business shall be continued or be liquidated.

Pequot Mills, Salem, Mass., have retained Lockwood, Greene Engineers, Inc., mill engineers, to determine the desirability of the old Ipswich Mills property at Ipswich, Mass., for use as a bleachery and also the cost of putting the old plant into shape for the finishing of products of the mills. The engineers will also make a study of the water supply, the suitability of the buildings and their capacity both for the present and for future growth, for it is known that Pequot Mills plans for a larger bleachery and finishing plant than the present Danvers Bleachery of the company at Peabody.

Otis Co., Ware, Mass., operating plants also in Three Rivers, and Bondsville, Mass., Greenville, N. H., has made a 10% reduction in wages effective Dec. 1 and affecting all office employees from the president down in all the plants. Operatives in the various mills are not affected.

***Aponaug Mfg. Co.,** West Point, Miss., has taken bids on the general contract for a one-story brick addition, 107 x 200 ft., steel sash, tar and gravel roof. It will cost about $50,000, with equipment. Robert & Co., Atlanta, Ga., are architects and engineers.

Amsterdam (N. Y.) Textiles have increased operations by enlarging its working force.

Harmony Mills, Cohoes, N. Y., have recalled 100 workers and started up 300 additional looms. It is now running at 75% of normal capacity.

***Avon Bonded Warehouse, Inc.,** Gastonia, N. C., has made application for a charter with authorized capital stock of $200,000, through W. A. Julian, Van A. Covington, and R. N. Aycock. This company, which includes 28 stockholders —creditors of the former Avon Mill, will do a general warehouse business.

Proximity Mfg. Co., owner and operator of **Proximity Cotton Mills, Proximity Print Works, Revolution Cotton Mills,** and **White Oak Cotton Mills,** Greensboro, N. C., as well as the **Granite Finishing Co.,** Haw River, N. C., will build a large warehouse, holding 20,000 bales of cotton, in the yard of the White Oak plant. This construction will involve an expenditure of about $50,000.

Cannon Mills Co., Kannapolis, N. C., will start a $50,000 addition to their finishing department within the next two weeks, thus enabling them to do this work at a considerable saving.

Dacotah Cotton Mills, Inc., Lexington, N. C., employing 200 workers, resumed operations last Monday after a shutdown of over two months. A new line of shirtings and similar materials will be made in place of cambrics.

Marion (N. C.) Mfg. Co. is enlarging its brick and wood warehouse which, when finished, will be 75x100 ft. Other improvements are being made at the plant, including the installation of 30 model X Draper looms.

Tarboro, N. C. Both the **Fountain Cotton Mills** and **Hart Cotton Mills, Inc.,** are prepared to reduce operations to 50% of capacity of the present full day and night schedule, depending on action by competitors.

La France Industries, Philadelphia, Pa., have taken title to a group of mills at Orthodox and Large Sts., assessed at $70,000.

F. W. Poe Mfg. Co., Greenville, S. C., recently instituted night work for the first time in many months, although all departments are not running full time.

Cannon Mills Co., York, S. C., resumed full day time operations last week. The carding and spinning departments have been operating only four days for the last few months.

Wool

National Dixie Mills, Inc., Newnan, Ga., are planning to add to production shortly as a result of an increase in orders.

Monomac Spinning Co., Lawrence, Mass., has resumed operations at its mill, with a working force of about 450 persons, and expects to maintain continuous production, for some time.

***Baltic Mills,** of the **American Woolen Co.,** Enfield, N. H., have started preliminary operations with a working force of 25 or 30 persons. The yarn department is the first to start and others will follow in rapid order as plans materialize. The mills will be producing at capacity within the next two or three weeks if expectations are fulfilled. About 125 hands will be needed in the initial project and more will be added as production increases.

Goodimate Co., Philadelphia, purchased outright the **Integrity Mills,** Kensington, Philadelphia. The machinery and equipment are being moved to the Goodimate plant on Reed St. Rubin Lipsky has made the statement that he expects to take over the entire personnel of the Integrity company as well. The Goodimate Co. manufactures men's clothes.

American Woolen Co., Burlington, Vt. The voters of Burlington have decided to exempt from taxation for 10 years, a building which will be started as a woolen yarn plant in connection with their two plants at near by Winooski. The exemption is given with the stipulation that the company will maintain a minimum weekly payroll of $2,000. Expectations indicate that the plant will require 400 workers.

Charlottesville (Va.) Woolen Mills. Plans have been completed and bids sent out for a 4 story and basement addition of brick and steel construction. It will replace several smaller obsolete buildings whose arrangement did not permit a good layout of modern equipment. Machinery from the old buildings will be transferred. These woolen mills, established in 1868, have an uninterrupted record of successful operation. D. Van Wagenen is president, and H. A. Dinwiddie, secretary-treasurer. Plans for the addition were prepared by Lockwood Greene Engineers, New York, who will also supervise the construction.

Knit

Newnan (Ga.) Hosiery Mills, are planning the early erection of a one-story addition, 30x60 ft., to be equipped as a dye house. Construction will be carried out by day labor. Robert & Co., Atlanta, Ga., are the architects and engineers.

Bear Brand Hosiery Co., Kankakee, Ill., has begun the construction of an addition, for which the general contract was recently let to the Immel Construction Co., Fond du Lac, Wis. C. P. Hubbard, Chicago, Ill., is the engineer.

Lawrence Mfg. Co., Lowell, Mass., employees will be affected by a 10% wage cut starting Nov. 23.

***M. T. Stevens & Sons Co.,** North Andover, Mass., following a meeting with a committee from the Chamber of Commerce, will reconsider a previous announcement that the Osgood Mills will be permanently closed. Nathaniel Stevens, head of the company plans a further announcement before long.

Edmond Hosiery Co., Bloomfield, N. J., recently formed with capital of $125,000, to operate a mill in this section, will be represented by Howard Peck, 262 Liberty Avenue, Bloomfield, attorney. Robert K. Comstock, 406 Berkley Avenue, Bloomfield, is an incorporator.

Van Brecklin & Stover Knitting Co., Amsterdam, N. Y., has leased its idle mill property to the Fitch Leather Coat Co. of Johnstown, N. Y.

**Indicates previous mention of project.*

Treinis Brothers, Inc., Brooklyn, N. Y., operating a hosiery mill, have leased space in the Gair Building No. 2, for a local plant, and will occupy it immediately.

Millfay Mfg. Co., Buffalo, N. Y., associated with Berkshire Knitting Mills, Reading, Pa., are adding new machinery and equipment for the production of new styles and better grades of silk hosiery. Production has been curtailed to about 50% of capacity to allow the dismantling of old equipment. The company operates under an agreement with the Berkshire firm, which uses the entire output of the mill.

Cromwell Hosiery, Inc., chartered under Delaware laws, has filed a certificate of statement and designation in the office of the Secretary of State, Albany, N. Y. It is capitalized at 500 shares preferred stock $100 par value and 1,000 shares common non par value. The New York City office is at 271 Church St.

Excelsior Knitting Mills, Inc., 2152 Superior Ave., Cleveland, Ohio, have been incorporated, and will specialize in sportswear. B. B. Haas will be associated with H. R. Klein in the new venture.

Fashion Hosiery Mills, Inc., Boyerstown, Pa., have increased their employees from 60 to 102 in the last two months and have been working on day and night shifts.

Crown Knitting Mills, Mohrsville, Pa., have increased their working force and are operating their entire mill six days a week to take care of increased business.

F. M. Grauer & Co., Philadelphia, has completed the installation of machinery for the manufacture of a new line of boys' hose.

Windsor Mills, Inc., Philadelphia, have purchased 20 fine-gauge machines of the latest model from Textile Machine Works, Reading, Pa. Installation will begin immediately.

Meinig Hosiery Co., Reading, Pa. The hosiery plant is understood to be closed for machinery repairs and adjustments, although unconfirmed rumor has it that the company expects to ship some of it to a southern location.

Oakbrook Hosiery Mills, Inc., Reading, Pa., are working full time with day and night shifts. Isaac C. Eberly, president, states that orders this year are running ahead of last year's.

***Greenwich Mills,** East Greenwich, R. I., have awarded a general contract to O. D. Purington & Co., Providence, for 3-story mill addition, 75x95 ft., from plans by Charles T. Main, Inc., Boston, Mass.

Charles H. Bacon Co., Lenoir City, Tenn. By unanimous vote of the board of directors, it has been decided to build the company's new full-fashioned mill next to the plant in Loudon. Seventeen carloads of equipment, used in the Camden, N. J., plant before operations were suspended there, must be moved by Feb. 15. The new plant will require about 130 workers. The company has branches at Loudon, Cleveland, Morristown, and Greenville, Tenn.

Appalachian Mills Co., Knoxville, Tenn., is running on a capacity schedule with a full working force.

Interwoven Mills Co., Berkeley Springs, W. Va., has resumed operations, hiring 60 employees.

Supersilk Hosiery, Ltd., London, Ont., Canada, is working on a day and night shift at the present time. Results of the first nine months of 1931 are in excess of the corresponding period for 1930.

**Indicates previous mention of project.*

Silk

H. R. Mallinson & Co., Inc., Trenton, N. J., has resumed operations at the local mill, following a shut down since last May. The initial working force is expected to be increased soon.

Kahn Silk Corp., Pawtucket, R. I., recently organized with a capital of $20,000, will take over and succeed to company of same name with local mill on River Street. Lester Friedman is the principal incorporator.

***Bruck Silk Mills, Ltd.,** Cowansville, Que., Canada, have just completed an addition to their dyeing and printing plants which will materially increase production.

Louis Roessel & Co., Ltd., Drummondville, Que., Canada, which has been running at limited capacity, is now on full time employing in the neighborhood of 150 persons.

Rayon

Delaware Rayon Co., New Castle, Del., has adopted a five day week. The company is now operating at 75% capacity.

Finishing

Jewett City (Conn.) Textile Novelty Co. started operating last Monday at the rate of 24 hours a day, six days a week; it had been going until 11 o'clock at night before this increase. Orders on hand indicate a capacity schedule for at least four months.

***Uncas Finishing Co.,** Norwich, Conn., purchaser of the Guerin Mill, Mechanicsville, Conn., is now installing mercerizing machinery, but will not start operations until after the first of the year.

United Throwing Co., Burlington, N. C., has purchased a number of Fletcher redraw frames.

United Wool Dyeing & Finishing Co., Passaic, N. J. Unless a settlement is reached by Nov. 17 in the action taken by Adolph Hauptman against the company, a receiver will be appointed. Mr. Hauptman charges insolvency and claims that assets are $20,000 and liabilities $100,000.

Pioneer Piece Dye Works, Union City, N. J., recently formed with capital of $100,000, to operate a local textile dyeing plant, will be headed by William Logan, Jr., 21 Park Avenue, Dumont, N. J. Edward A. Aichelman, Union City, is interested in company.

***Yarns Corp of America,** Spartanburg, S. C. Under the terms of a court decree the properties of the Spartanburg unit of the company are ordered to be sold on Dec. 7. The order of sale results from a suit brought against the corporation by Central National Bank of Spartanburg for the collection of a mortgage or deed of trust given by the Yarns Corporation as security for a $250,000 bond issue. Henry J. Blackford, Spartanburg, S. C., receiver, is directed by the court to act as agent for the sale.

Franco Canadian Dyers, Inc., St. Johns, Que., Canada, are back on full time and have hired extra help.

New Books

INDUSTRIAL STRUCTURE OF NEW ENGLAND. United States Department of Commerce, Bureau of Foreign and Domestic Commerce, 1930; 591 pages; $1.30.

COMMERCIAL STRUCTURE OF NEW ENGLAND. United States Department of Commerce. Bureau of Foreign and Domestic Commerce. 323 pages. $0.95.

These two books, together with the Market Data Handbook of New England, contain the information obtained by the Department of Commerce in conducting the commercial survey of New England. The volumes represent the second regional survey conducted by the department, the first dealing with the Southeast.

The Industrial Structure of New England offers comprehensive statistics and information on the productive resources, and the manufacturing and industrial life of the region. Textiles come in for considerable treatment, covering 127 pages, and each branch of the industry is covered by a narration of the history and economic changes, and a description of the present relative importance and immediate conditions. Interesting comments from mill men on the subjects of machinery modernization and merchandising are included. The gathering of so many statistics in one volume makes the book useful as a reference.

The population, incomes, trading centers, and productive activities of New England, by regions, are covered by the volume on the commercial structure; and analyses are made of a wide range of topics, including buying habits, credit facilities, wholesale and retail trade, chain stores, traffic, etc. The book is of value in planning sales campaigns and conducting any other work which requires a detailed knowledge of the market.

1931 YEAR BOOK OF THE MERCHANTS' ASSOCIATION OF NEW YORK. Published for the association in New York City.

This business directory offers an up-to-date index of New York business firms and includes 900 out-of-town concerns which have branch offices or sales agencies in the metropolis. Among the textile divisions represented are: wholesale dry goods; department stores and women's wear specialty stores; men's apparel and kindred lines; house furnishings, floor coverings, decorations and kindred lines; shoes, footwear and shoemakers' supplies.

New Machinery *and* Processes

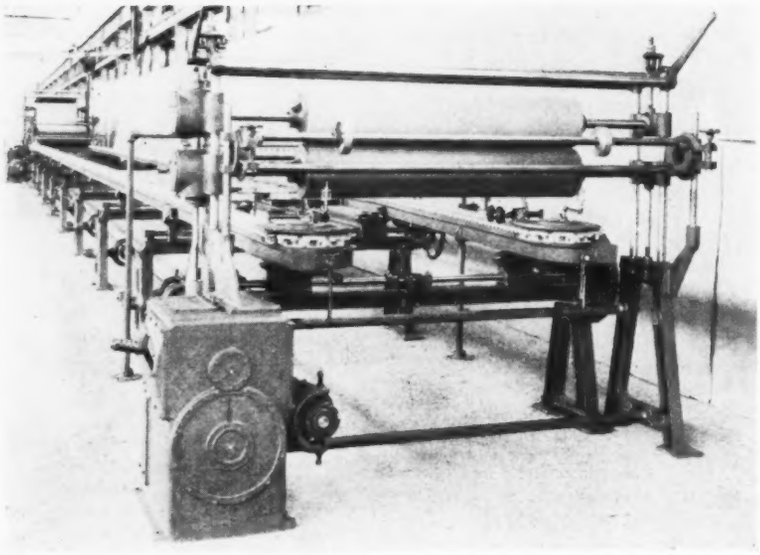


Fig. 1. Sanforizing machine viewed from entering end, and with tenter housing removed to show construction of warp-shrinking unit

Improved Sanforizing Process Permits Controlled Shrinkage

CONTROLLED pre-shrinking of woven fabrics in such a manner as to allow both warp and filling to be pre-shrunk to any desired degree is made possible with the improved Sanforizing process developed by Sanford L. Cluett, of Cluett, Peabody & Co., Troy, N. Y. Originally employed for finishing shirting materials, the Sanforizing process is finding increased application in processing dress goods, overall fabrics, ducks, uniform cloths, and other materials.

Although the chief advantage cited for Sanforizing is that it enables positive control of shrinkage, it is pointed out also that it mechanically frees the fabric from any distortion and adds a lustrous finish to the goods. A number of finishers are now producing Sanforized cotton fabrics, and others are installing equipment with the expectation of being in production by fall.

The original Sanforizing process and equipment which was designed to subject the fabrics to a cross-wise tension and thus remove the tendency to warp shrinkage was described in the April 12, 1930, issue of TEXTILE WORLD. Numerous improvements and refinements have been made in this equipment and supplementary devices have been added to permit pre-shrinking the filling.

Licenses to build Sanforizing units have been granted to H. W. Butterworth & Sons Co., Philadelphia, Pa.; Morrison Machine Co., Paterson, N. J.; and the Textile-Finishing Machinery Co., Providence, R. I. In the accompanying article is illustrated Sanforizing equipment manufactured by the Morrison Machine Co. Details of a new Sanforizer recently completed by H. W. Butterworth & Sons Co., and a complete unit now being built by the Textile Fnishing Machinery Co., will be given in subsequent issues.

The Morrison Sanforizing unit consists essentially of a padder, pin chain tenter, atomizer, and steamer for giving warp shrinkage; and a compensator, padder, atomizer, steamer, ironer, and blanket—or Palmer—finishing machine for securing filling shrinkage. The complete equipment is set up in range to enable continuous production. Modern equipment enables a speed of 48 yd. per min. on goods weighing 1.80 yd. per lb. and speeds of 80 to 90 yd. per min. on lighter goods such as broadcloths, percales and kindred fabrics.

Controlled shrinkage is obtained by first subjecting a sample of the fabric to be Sanforized to repeated washings in order to determine exactly what shrinking action would occur in actual use. When the behavior of the fabric has been predetermined in this manner, the machine can be so adjusted as to pre-shrink to the degree desired.

Warp shrinkage is induced by entering the fabric through the differential feeding pad which feeds the goods on to the chain tenter at a speed that is greater than the tenter speed by an amount equal to the desired shrinkage of the material. The fabric is then subjected to a spray of moisture from an atomizer; and is steamed. As it passes down the tenter frame the fabric is stretched crosswise, thus straightening the filling threads, and causing the warp threads to rise and fall over the filling. In this way the cloth is pre-shrunk to the desired length. The fabric now passes through a hot air enclosure and thence off the tenter and over the compensator into the second atomizer and steaming unit.

Here the goods are again dampened in order that they may shrink in width before going on the Palmer finishing machine, which dries the fabric, gives it the final shrinking and imparts a desirable lustrous effect.

In Fig. 1 is shown an illustration of the Sanforizing machine viewed from the entering end, with tenter housing removed to show construction of the warp-shrinking unit. Particular attention is called to the differential feeding pad, the rotary brushes for impressing the cloth on to the pin chain in a series of ripples, and the totally-enclosed quick-change gear. A Schwartz guider mounted on ball bearings and attached to the front of the machine, but which is not apparent in the illustration, is another feature. The quick-change gear enables a definite relation to be estab-

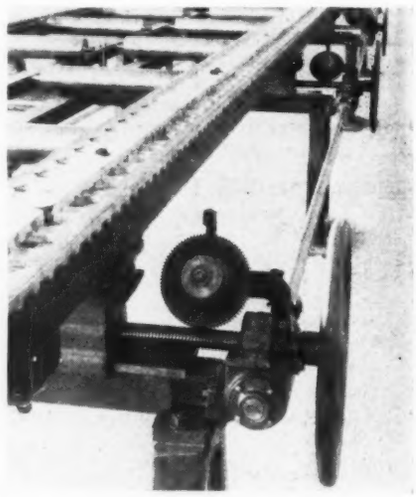


Fig. 2. View of tenter frame showing method of securing separate articulation for each section. An expansion joint in the rails of the frame compensates for changes in temperature, and a limit switch governs the width to which the section will spin

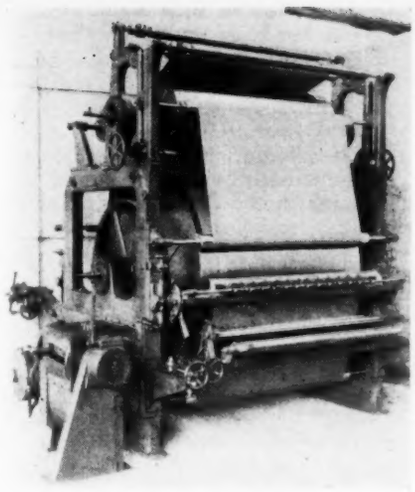


Fig. 3. Close up of Palmer machine with electrically heated shoes and quick-change gear

lished between the speed of the pad and the tenter. Thus, if the warp shrinkage required in a particular fabric is found to be 2 in. per yd., the pad is set to deliver cloth to the tenter at a speed 2 in. faster than the tenter is moving. The quick change gear shown provides for warp shrinkage ranging from 0 to 3½ in. by increments of ¼ in. This device is equipped with roller bearings and is constructed of stainless steel. Any desired differential in speed in the range mentioned is obtained simply by setting the hand lever.

A view of the tenter frame is shown in Fig. 2. To permit maximum production a 90-ft. frame built up of 10-ft. sections is usually employed. The first four of these sections are articulated independently so that a gradual drawing of the cloth to the desired width may be obtained. Opening shafts on the side of the tenter between the sections are equipped with universal joints to preclude the possibility of binding due to misalignment.

Helical driving gears on the delivery end of the tenter run in oil are totally enclosed. A set of motor-driven rotary fingers expels the fabric from the pins on the delivery end. The delivery section is also separately articulated to prevent tension as the cloth leaves the tenter. The tenter pin plates are of a new angle-type having inner and outer rows of aligned pins, the space between the pins of the respective rows being greater at the basis than at the points.

An atomizer which subjects the fabric to a uniform spray of water is attached to the first section of the frame. This is provided with a device for fixing the width of the atomizing surface and a drip pan for carrying off the condensate. A second atomizer is installed between tenter frame and Palmer machine.

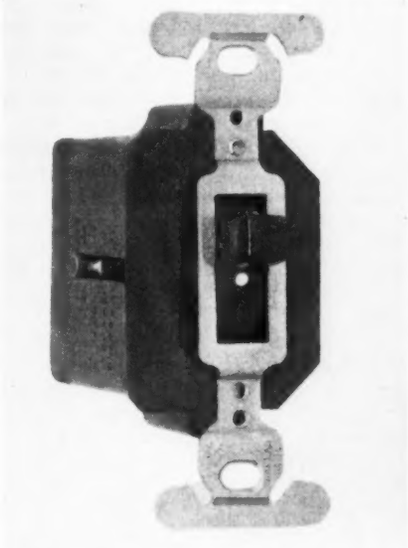
The tenter frame is equipped with a hot air enclosure; and a forced hot-air draft quickly drying the cloth and completing the warp shrinkage.

The filling shrinkage unit consists of an intermediate feeding device, takes the cloth from the tenter, passes it through the second atomizing and spraying system, and feeds it to the Palmer finishing machine. This feeder is equipped with a sensitive dancer roll which automatically controls a variable-speed mechanism and in this way holds the cloth taut without undue tension.

A close-up of the Palmer is shown in Fig. 3. A spreader of special design receives the cloth as it leaves the steamer, removes any scrimps or wrinkles without exerting undue tension, and delivers the fabric to the Palmer feed roll. The Palmer consists essentially of 5-ft. steam-heated cylinder over which is mounted a 24-in. steam-heated cylinder; an endless woolen blanket about ⅛ in. thick envelopes both cylinders. On top of this blanket is located a series of shoes having concave surfaces which fit the convex surface of the blanket. By means of electrodes, these shoes are heated to a temperature of approximately 400° F. The cloth in a damp condition strikes the hot shoes and is given the final shrinkage. It then passes around the larger cylinder and over the top of the smaller cylinder to a batching or pleating device. Both cylinders are accurately sized, so that the surface speed of each will be exactly the same and that of the larger one identical with the linear velocity of the cloth. The 24-in. cylinder, which is used to dry the blanket, does not come in contact with the fabric being Sanforized. A pair of self-adjusting chromium-plated pressure rolls arranged below the feed rolls, hold the blanket in firm contact with the cylinder and thus prevent slippage between the blanket and the cylinder. Guide rolls, which carry the cloth around the large cylinder and over the end of the small cylinder, are driven at a surface speed equal to the drum speed and thus carry the cloth forward with a minimum of tension.

Since the warp shrinkage induced on the tenter reduces the linear velocity of the fabric, the Palmer is equipped with a quick-change gear which permits ready adjustment of its speed to correspond with the shrinkage given to any particular fabric. This device is essentially the same as that employed on the initial feeding device, but is also arranged to permit a gain in speed in the event any slackness occurs between the tenter and the Palmer due to fabric stretching instead of shrinkage which the nature of some fabrics require.

Other structural features of the improved Sanforizing machine include rugged cast-iron framework, enclosed gearing, and ball bearing drive shafts.



Mercury switch makes and breaks the circuit without an open arc

Electrically lighted periscope for examining the interior of containers

Interior Periscope

AN INGENIOUS device for observing the interiors of various containers has been developed by Kollmorgen Optical Corp., 767 Wythe Ave., Brooklyn, N. Y.

This device is applicable to the examination of drums, barrels, cylinders, etc., and is said to enable the operator to determine whether the container is in need of repairing or cleaning. The contrivance consists essentially of a small periscope, illumination being provided by means of a built-in electric light. The chief advantages cited by the manufacturer are the elimination of the cost and trouble of cutting into the vessel to "take a look" and the factor of safety. It is believed that this instrument will find use in the internal inspection of the many containers found in and around textile plants.

Mercury Tumble Switch

ANNOUNCEMENT is made by General Electric Co., Schenectady, N. Y., of a new mercury flush tumble-switch, the essential feature of which lies in the fact that the circuit is made and broken by mercury contained in a sealed tube. The tube is tilted by the handle when the switch is operated. The switch has a composition box slightly deeper than that of customary switch boxes. The instrument is made only in the single-pole type.

Questions... *and* Answers

Manufacturing Merino Yarn

Technical Editor:

We are interested in knowing how to manufacture merino yarn. Our plants manufacture 20s to 80s carded and combed, and we would like to have details on spinning cotton and wool on cotton equipment. (7723)

The average mill manufacturing merino yarns buys its wool in a form similar to cotton sliver, but known as top. After the tops have been delivered, the next step is to cut them to staple. Generally the average staple of cotton mixed with wool for the better types of merino yarns is approximately 1⅛ to 1¼ in. in length; therefore the wool would be cut approximately to this length. Any type of cutter with a revolving blade or blades can be used efficiently. Such machines give a fair production at a reasonable first cost.

The next items to be considered are what percentage of wool is required and what quality of yarn is to be manufactured. Even though we have spoken of buying and cutting the tops, let us forget this for a moment and review an old subject—the mixing of fibers and hairs other than cotton with cotton.

The finer the diameter of the individual hair or fiber other than cotton, the better it mixes with cotton. This one item has caused considerable trouble for more than one mill and individual. Providing smooth yarns are desired, the wool or individual hairs should be of a fine grade. A broad classification of wools in order of their increasing fineness is as follows: quarter blood, half blood, three-quarter blood, full blood.

The foregoing information is more or less the experience of one individual, and to state that the information and schedules to follow are standard would be like stating that every mill uses the same organization for making 30s cotton yarn.

With half blood and three-quarter blood wool, mixes of 20 to 50% wool have been made; with quarter blood 10 to 15% have been made:

10 to 15% quarter blood—15s (cotton count).

20% half blood—20s to 25s (cotton count).

20 to 50% three-quarter blood—25s to 40s (only small lots of 40s).

Cotton that is to be mixed with the wool should be opened and cleaned before being used for mixing. There are two methods of making the wool and cotton mixes. One we shall call the hand method; and the other, the machine method. The amount of wool to be used in the mix would of course be weighed, as would the cotton.

The hand method is becoming obsolete as it involves considerable manual labor. The procedure consists of laying down in a bin one layer of cotton, one layer of wool, one layer of cotton, etc., until the proper amount of cotton and wool is mixed.

The machine method would involve the use of two or more feeders or hoppers so regulated that they will deliver the correct percentages of wool and cotton. When delivered from the feeders and hoppers, the stock will drop on to a conveying belt delivering the stocks to a bin or will be picked up by an air conveyor pipe and carried to a condenser or distributor in the bin. The reason for delivering to a bin rather than direct to breaker pickers is that whatever stock runs out last at the feeders and hoppers will receive additional mixing when removed from the bin.

Provided that it is desired to reduce waste to a minimum, it will be necessary to place sheet metal over all grids, bars, or screens. This will prevent considerable of the stock, especially the wool, from falling out while in process. This is especially applicable to pickers and cards.

It is recommended that two processes of picking be used, as this will tend to blend the stocks more evenly. It must be remembered that, although a certain percentage of each stock is in the mix at the start, it does not mean that the same percentages will exist in the final yarn. In carding, especially, an appreciable portion of the wool is likely to be lost.

When the finisher picker lap is made, it is ready for the card; and on this machine blank screens should be used under licker-in and cylinder. It is suggested that the licker-in speed be not less than 450 r.p.m. and that the number of mote knives be reduced from two or three to one. Many mills using the regular card for wool-and-cotton mixes complain of the amount of wool being taken out in the flat strips and of considerable loading of the cylinder. There are no real remedies for these troubles without considerable rebuilding of the card, but flats can be raised 15 to 20 one-thousandths from the cylinder and the flat speed reduced as low as possible.

Attaching a fancy roll or continuous stripper to the card will agitate the stock in the cylinder wire, and there will be a longer time between stripping. In fact, the fancy roll will eliminate daily stripping, as will the continuous stripper on some of the mixes.

At the succeeding processes, such as drawing, roving, and spinning, actual experience will be more useful than a written explanation. Generally speaking, however, speeds will be the same on these processes, with the exception that slightly more twist will be necessary when coarse wools are used.

Roll settings may have to be wider between second and third, and between third and back, on the drawing; and between second and third on the roving and spinning. In one instance weighting was increased 2 lb. on the front roll of the drawing (metallic roll).

This answer has covered things in general, as most of the difficulties arise at picking and carding; and they are due, in many instances, to local conditions and the desire to do the experimental work as cheaply as possible. This practice delays the gathering of sufficient information.

It is suggested that you obtain 10 lb. of quarter-blood wool and 10 lb. of three-quarter or full-blood wool, and mix each with the same amount of cotton. For experimental purposes run them on the regular cotton processes, making mixes by the hand method.

▼

Scouring Quarter-Blood Wool

Technical Editor:

I shall appreciate your answers to the following questions: (1) What percentage of top return should I expect from an English system, single-combed, quarter-blood Missouri or Michigan wool? (2) What is the approximate charge per pound for custom scouring the above type of wool? (3) Do you think it is more economical for a small combing plant to scour its own stock or to depend on custom scouring? (7729)

The percentage of top return from any lot of grease wool is dependent upon several variables. It will be affected by the blend; the efficiency of the sorting; the demands of the customer as regards staple and quality in the top; the method of scouring; the excellency of the carding, gilling and combing; and, finally, the percentage of oil called for in the top. A prominent

commission wool comber states that the yield would vary between 42% and 50% of the grease wool. The loss covers off sorts, shrinkage, waste, and noil.

The approximate charge for custom scouring should be around $1.75 per 100 lb.

The question as to whether it is economical for a small combing plant to scour its own stock cannot be answered until details are given regarding the number of combs and the quantity and quality of the water supply.

▼

Defect in Sewing Thread

Technical Editor:

I am sending you two spools of sewing silk, and I would like to have you advise me what causes the frayed spots that show plainly in this thread. I do not think that these defects are caused by poor stock. (7728)

The defect arises from the intermittent formation of large loops by one of the doubling yarns. The cause of this will be found in uneven tension of the strands during the twisting operation.

▼

Cleaning Monel Metal Equipment

Technical Editor:

We have experienced considerable trouble in keeping clean our Monel metal rotary dyeing machinery. At the present time we are using a solution of caustic soda. Our water supply has a lime base. We have noticed a great deal of dirt on our machines, which we believe is caused not only from the lime but also from the excessive amount of oil in the rayon. Any information you can give us on this subject will be appreciated. (7710)

Monel metal apparatus should present little or no difficulty in cleaning. Grease, dyes, or other foreign matter can be readily removed by wiping or boiling out. Monel metal is not penetrated by oils or dyes and is corrosion-resistant; because of these features, it is widely used in dyeing machines. We know of several mills which have been using Monel metal machines for many years without experiencing any trouble in keeping them clean.

In dyeing rayons which have an excessive oil content, it may be found that at the conclusion of the processing, there may be some grease sticking to the side of the machine; but this should not prove difficult to remove. One method of cleaning is by boiling out the machine with soap and alkali. The machine is filled to one-half its capacity with hot water, a scoop of some scouring soap and one of soda ash or trisodium phosphate are added, and the mixture is boiled until the soapy foam flows over the top of the machine. The metal is then brushed with an ordinary broom, the process repeated, and the machine is given a final rinse with hot water. If the water is hard, and sufficient foam is not obtained to make the suds rise over the top of the machine, more soap should be added.

Water containing lime salts is ordinarily termed hard water. Use of hard water in processing rayon hosiery is far from good practice, and we advise you to take steps to correct this condition.

▼

Spots in Dyed Rayon Hosiery

Technical Editor:

We are sending you under separate cover samples of women's rayon hosiery. We have been finding quite a few black spots in the yarn. Apparently these spots are due to be some pigment on the yarn. We have been unable to determine whether or not that is what is in the stockings after they are dyed. Will you kindly examine the samples and see if you can tell what is causing our trouble. (7686)

Our examination shows that the spots are not caused by any black-spotted yarn. If there were any spots on the yarn used in knitting the hosiery, they have evidently disappeared in the dyeing.

We unraveled some of the yarn where the spots showed, and found that in every case the yarn was spotted in the loops of several courses up and down; whereas if it were caused by the spots in the yarn, it would have shown in several loops in the same course. The real trouble is that the boiling off or the washing was not properly done.

The spots on these hose are what are called, in the parlance of the hosiery dyer, "nigger heads." They are the result of imperfect washing out of soap or scouring oils. Whatever agent has been used in processing the hosiery has broken down instead of remaining in an emulsified condition until thoroughly washed out of the goods. When this happens, no amount of washing will remove the "nigger heads" from the hosiery.

An insufficient amount of detergent or use of materials of poor quality may cause the bath to break. Rinsing the goods in water that is too hot or too hard may break up the remnants of the scour instead of washing it out of the goods, and nigger heads will form. When this occurs, and it is noticed that grease is floating on top of the water in the machine, flooding will not be of much help. The proper thing to do is to add enough mild alkali to saponify the fat or oil and to work the goods in the machine until no more of grease is visible. Then rinse well in lukewarm water until reasonably clean.

Rayon hosiery should first be scoured free from all lubricants which have been used on the yarn. A rich scouring bath made up with a good grade of scouring oil is usually recommended. When the goods are well scoured, washing is the next important step. Hot water for the first rinse, when the goods are still charged with the detergents, is not dangerous, and will help in removing most of the spent oils. Subsequent rinsing must be watched carefully, and should not exceed the proper temperature, which may vary according to whether soft or hard water is available. With hard water, it is still possible to obtain good results by adding a small amount of ammonia or other mild alkali to soften it.

Inquiries should give the fullest information possible; and if damaged material is involved, a sample should be sent. We give no consideration to anonymous inquiries and do not undertake routine analysis of yarn or fabric, or investigation involving unusual expense.

▼

Dyeing of Rayon-Cotton

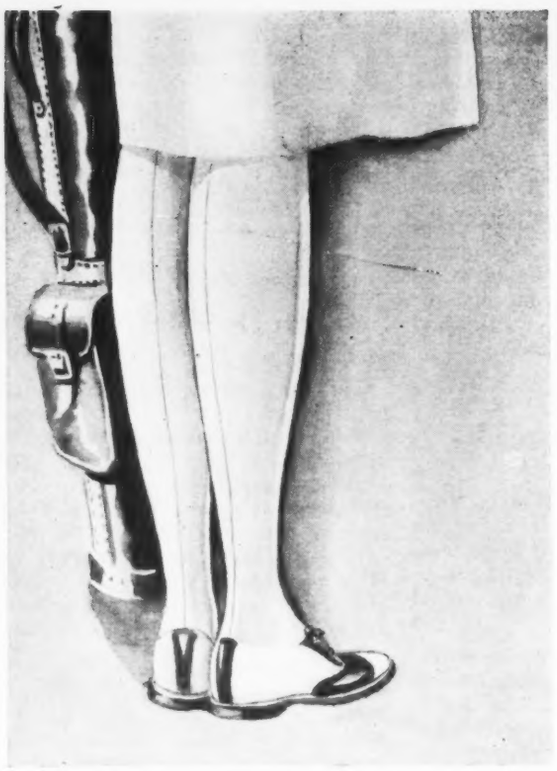
Technical Editor:

Enclosed you will find three samples of rayon sateen. We are having trouble in dyeing the cotton and the rayon the same depth of shade. The dark brown sample is ours. You will notice how great the contrast is between the cotton and rayon, the rayon being much heavier than the cotton. We desire to duplicate the dyeing of the light brown sample, in which the cotton and rayon are both dyed the same depth of shade. Can you tell us how to do this with direct colors? (7705)

Since viscose is modified cellulose rather than cellulose, it possesses in a still higher degree the increased affinity for substantive dyes which mercerized cotton shows in comparison with ordinary cotton. Given a fair opportunity, it will take the greater amount of dye from a dyebath and leave any cotton present deficient in color. In pale shades, the cotton may dye deepest; in medium shades, without salt, the two fibers may dye alike; but in deep shades, even without salt, the tendency is for the rayon to take most of the dye. To offset this, many dyers use a very great excess of dye, and stop the dyeing when the dyebath is still far from being exhausted.

If complete exhaustion of the dyebath is obtained, the contrast between the two fibers is more marked.

There are a few dyes which have only a slight affinity for viscose, and yet dye cotton well. In this class are the Direct Catechines and the Stilbene Yellows and Oranges, which are suitable for making the shade desired. Triazol Browns B and G and Trisulphon Browns are also fairly good for this purpose.



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Their running qualities are unexcelled.

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J and E. Venango Sts.
Philadelphia, Pa.

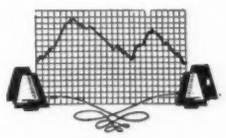
TEXTILE WORLD ANALYST

No Sustained Rise In Silk Is Likely

By Dr. L. H. Haney

SUMMARY

In view of the weaker statistical position, silk prices can hardly show any sustained rise. Further moderate recessions seem probable.



GREAT uncertainty characterizes the silk industry at present, one of the chief elements of uncertainty being found in the Japanese situation. Will there be war? Will the Japanese yen go the way of the English pound? Immediately this uncertainty is retarding activity in the silk business on the buying side and increasing the pressure on the selling side, with the result that prices tend to weaken. The Japanese reelers have been rushing silk to market, increasing port stocks despite heavy export shipments.

At this writing it hardly seems likely that there will be a war, and it seems quite certain that if there were one it would not amount to much owing to the financial condition of the prospective combatants. If there were a war it would probably weaken Japanese finances still further and thus increase pressure to unload the large quantity of silk held there. The shutting off of Chinese silk by war would change the existing situation but little, since high silver prices and disturbed conditions in China have already had that effect.

It is notable that despite the large sales of raw silk in Japan, the silk market has made relatively little response to the recent speculation in commodities, the October average price being below September and only fractionally above the lowest monthly average of the recession. If war were considered a bullish factor by the Japanese, why would they be in such a hurry to sell silk and why would there be no greater strength in the silk market?

If there is to be no war, there is no net change in the situation except that the rush to sell silk in advance of possible hostilities has increased the visible supply, and the preparation for war must have weakened the financial position of Japan.

War or no war, the probability remains that the yen, which is now being "pegged" by the Japanese, is likely to decline in due course, and such a decline would almost certainly bring lower silk prices in terms of the dollar.

Bull Points

1. Fairly heavy withdrawals from domestic storage occurred in October; the figure was somewhat larger than anticipated.
2. New York stocks of silk are still moderate.
3. The activity of silk spindles and broad looms increased more than seasonally in September.
4. Increased activity is reported on the part of hosiery mills.
5. Wholesalers' stocks of silk goods at the end of September were 16.2% under a year ago; yardage sales were 3.4% over a year ago.
6. The higher price of silver has helped to make the Chinese silk markets strong.

Bear Points

1. The world visible supply of raw silk touched a new high in October.
2. The world consumption for the season to date is estimated to be under that of the past three seasons and considerably under world production.
3. Japanese pressure to sell is evident in the heavy into-sight movement and large export shipments.
4. Stocks at Yokohama and Kobe have increased and are much above a year ago.
5. Heavy imports into the United States have brought a sharp increase in the visible storage at New York.
6. Spindle activity seems high in comparison with the sales of goods.
7. Estimated deliveries remain much out of line with machinery activity, and accumulation of stocks in second-hands is confirmed by reports of resales.
8. Some broad silks are being sold at less than replacement costs; manufacturers still await evidence of spring business and keep purchases at a minimum.
9. Uncertainty as to styles.
10. European silk markets dull and backward.
11. Considerable increase in certificated stocks for delivery on exchange contracts.

Evidently there has been some increase in manufacturing activity in this country; but this has been at the expense of profit margins in most cases, while the very easy world supply situation has become increasingly burdensome on acount of Japanese conditions. Barring unforeseeable inflationary developments, further weakness in silk markets is indicated.

Statistical Position

The outstanding point in the October statistics of the Silk Association was the extremely large volume of imports, which, at over 70,000 bales, made a new high record. Moreover, the quantity in transit was also very large, the 59,700 bales afloat comparing with 46,400 bales a year ago. The imports were probably the highest in comparison with current deliveries ever recorded for the month.

The next most significant fact was the rather sharp increase in stocks in storage at New York. At 49,900 bales stocks increased more than 13,000 bales, which is unusually large. From being low, the local storage has jumped to fully normal proportions and is nearly as large as a year ago. Storage is not yet excessive, however, being only 88% of current deliveries. The large quantity in transit makes a further increase probable.

Such comfort as may be drawn from the figures lies in the estimated "deliveries," or withdrawals from storage. Out of the 70,000 imported, only 13,000 went into visible storage and, consequently, it is estimated that about 56,000 bales were withdrawn. This is an increase of about 2,800 bales over September, but about 5,300 bales under a year ago.

The domestic statistical position is thus certainly not bullish. It suggests

The analysis and forecast by Dr. Lewis H. Haney, Director, New York University, Business Research Bureau, which regularly appears on this page, considers various branches of the textile industry from week to week. The conclusions reached in the Analyst are mostly forecasts and generally apply to a time two or three months ahead. The Analyst is based on statistical data and does not reflect temporary trade sentiment.

SECOND ONLY TO CREATIVE GENIUS IS THE CHOICE OF WORTHY MATERIAL

COACH BUILDERS OF QUEEN ELIZABETH'S DAY SET HIGH STANDARDS OF CRAFTSMANSHIP.

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MONOMAC SPINNING CO.
French Spun Worsted

•

ARLINGTON MILLS
Bradford Spun Worsted

•

ACADIA MILLS
Mercerized Cotton

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NONQUITT MILLS
Fine Combed Cotton

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CRAMERTON MILLS
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that imports and domestic storage are likely to increase in November and exert more pressure.

The combined stocks at New York and Yokohama remain very large. The average for the last three months is 153,000 bales which we estimate to be more than 130% above the average for 1922-26. It is true that domestic machinery activity has increased and in September was the highest since last February. It is still below the average for 1922-26, however, and the stocks appear excessive in comparison.

The world visible supply (which includes in addition to the stocks at New York and Yokohama, the quantity in transit, stocks at Kobe, and other than Japanese silks at New York) made a new high record of 263,421 bales at the end of October. This compares with 239,678 bales a year ago. In Japan there are at least 153,800 bales. While a large part of this is in custody, even the "free" stocks of over 45,000 bales would have been considered ample up to a year or two ago.

The October into-sight movement in Japan, reported to have been over 68,000 bales, appears to be a new high record for the month.

Increased Activity Is General

There was a more-than-seasonal increase in the indexes of silk manufacturing activity in September. The seasonally adjusted index of "deliveries" of raw silk was a trifle higher in October than in September. The October deliveries were at a higher annual rate than the average for recent years. There was, however, a considerable decrease in the *rate of increase* in this index, and it was below a year ago.

Not only was the index of deliveries above average in October, but it was also above its average relation with the indexes of spindle activity and of loom activity. This apparent lack of balance between "takings" and indicated mill consumption suggests that manufacturers are in an easy position as far as their raw material supplies are concerned. Such a situation is not one which makes for a sustained rise in raw silk prices.

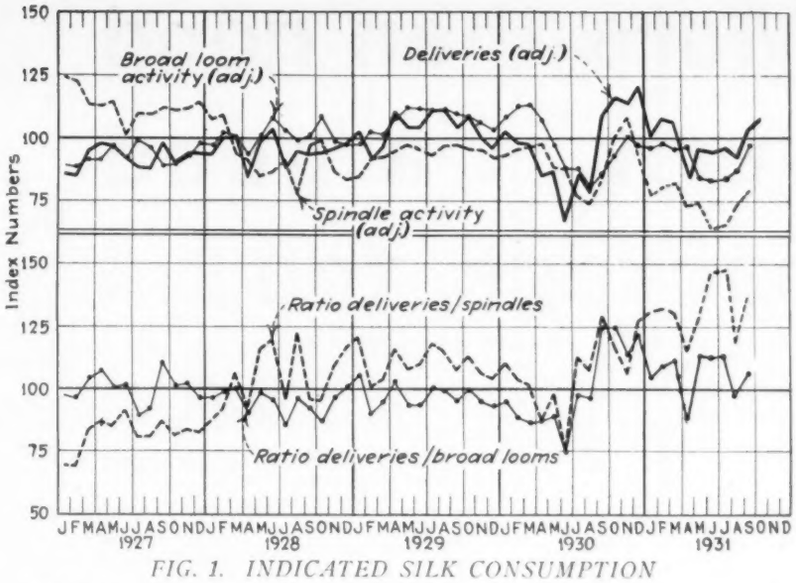
Broad loom activity (adj.)
Deliveries (adj.)
Spindle activity (adj.)
Ratio deliveries/spindles
Ratio deliveries/broad looms
Index Numbers
150
125
100
75
50
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1927
1928
1929
1930
1931

FIG. 1. INDICATED SILK CONSUMPTION

Deliveries—bales: Spindle Activity, Broad Loom Activity—per cent of normal machine hours operated. All three indexes adjusted for seasonal variation. Ratio of Deliveries to Spindles and Ratio of Deliveries to Broad Looms based on above indexes. Average of 1927-1929 = 100 for all indexes. Source: Silk Association of America

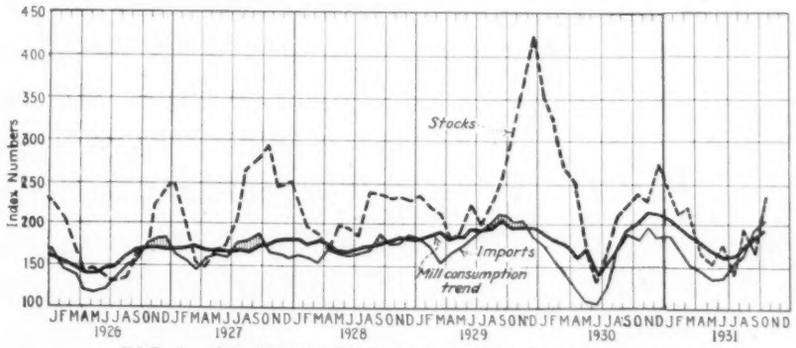
Stocks
Imports
Mill consumption trend
Index Numbers
450
400
350
300
250
200
150
100
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1926
1927
1928
1929
1930
1931

FIG. 2. STATISTICAL POSITION OF RAW SILK

Stocks of Raw Silk, Bales in storage at end of month. Average 1921 = 100 (Silk Association of America). Imports, Pounds. Average 1921 = 100. Three months moving average (Dept. of Commerce). Last month estimated by converting each item of Silk Association figures from bales to pounds and then applying the per cent increase to preceding month. Factory Consumption, Trend, Deliveries—Bales, average 1921 = 100. Five months moving average (Silk Association of America)

Spindle activity increased more than seasonally in September and was the largest since March. Our adjusted index was 77.8% of the average for 1927-29 in September, against 72.4% in August and 84.1% a year ago. The adjusted index of broad loom activity was 98.7% of the same average in September, which was the best showing since February. The August figure was 87.4% and a year ago 87.2%. It is probable that October machinery activity will show a further gain in the adjusted indexes, and that it is not so far out of line with deliveries as in September.

The relatively high level of "deliveries" as compared with machinery activity during most of 1931 indicates a maladjustment which could be corrected by greater activity. Would not such an increase in activity, however, repeat the performance of a year ago when a spurt appeared in the silk industry (from the activity standpoint as distinguished from earnings) only to be followed by a period of distress selling and unsatisfactory profit margins?

Silk Goods Situation

The price of staple silk goods has been practically unchanged at bottom levels for several months. Trade reports indicate that many broadsilks are selling below replacement costs. The sales statistics tend to substantiate the foregoing statements. Dollar sales of silk goods at New York were considerably less than last year in September, while yardage sales were 3.4% larger.

Probably the increase in the sales of silk goods from August to September was less than usually occurs between those months. This failure of the sales indexes to show a good gain while machinery activity was being stepped up fairly rapidly, cannot have any but an unfavorable interpretation.

Stocks of silk goods (wholesale) in the New York district, however, were 16.2% below last year in September.

Market Briefs

Cotton: ***Easing market as commodity boom dwindles.***
Cotton Yarns: ***Sales possible only at cut prices.***
Cotton Goods: ***Lack of Stability in gray goods feature of otherwise hopeful market.***
Wool: ***Easier trend has crystalized and hope for stability rises.***
Worsted Yarns: ***Market neglected and sales consequently few.***
Woolen Goods: ***"Wool Week" inspires confidence.***
Silk: ***Mills re-selling; outlook uncertain.***
Silk Yarns: ***Spun yarns active; thrown silk quiet.***
Silk Goods: ***Active sampling of spring fabrics; little buying.***
Rayon: ***Weavers increase orders; better tone.***
Knit Goods: ***Hoisery movement for Christmas shows pick-up: full-fashioned mesh preferred. Spring underwear in fair call; winter underwear and sweaters steady.***

More than good yarn . . a good package, too . .

Quissett has had enough experience to know that good yarn is not quite enough. The package must be good, too. Because careless packaging of yarn can tie up your production, can make the high strength or the even twist or the uniformity of the yarn go for naught.

That's why Quissett never slights packaging. That's why the care and skill used in packaging is on the same high level as that which goes into the spinning of Quissett Yarn. When the yarn reaches you, you'll have to look long and closely to find a cone or tube with cobwebs, or with other imperfections that would cause the yarn to slough off. The yarn is wound with even tension – not too soft, not too hard. No crossed or broken ends in warps, either. And if you get yarn in skeins, you'll find it properly reeled, ready for fast, easy rewinding.

The package counts heavy in production costs. Keep those costs low by using Quissett Yarn – strong, even, uniform, and packaged right. Samples of combed or carded yarns, in all numbers and in your regular put-up. Write.

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YARNS AND RAW MATERIALS

TEXTILE WORLD ANALYST

◆Cotton Yarns Find Less Interest

INTEREST in cotton yarns is at low ebb. This attitude has continued now for the last week according to dealers, following the period of activity which had prevailed for some time. Various factors are suggested as the basis for this changed attitude, such as the decline in cotton, which weakened a growing confidence in yarn values. On the other hand, the continued unseasonable warmth of fall weather is declared to have checked any development of business or the movement of finished goods, so that goods manufacturers have received a comparatively small volume of business themselves. Manufacturers are not worried about their ability to cover their yarn requirements when they eventually get orders for their own goods. With the approach of year-end inventory, they are naturally anxious to reduce stocks as much as possible.

Yarn dealers find an encouraging factor in the fact that their collections are very good indeed. Even those accounts which are recognized as slow in payments have been meeting their obligations.

In face of the decline in active interest in yarns, prices have shown a tendency to reveal soft spots, especially with those spinners who are beginning to want more orders on their books. However, there is hardly enough business being done at present to fix prices on any established basis. Spinners who a week or so ago asked 21c. for 30s-2 warps, have been showing a willingness to accept offers of 20c., with 20 to 20½c. the average quotation for ordinary quality, 21c. for very good yarns, and 22c. for plush yarns. On 20s-2 warps, 16½ to 17c. is noted, but not much demand lately shown.

Carded knitting yarns also are reported quiet with only occasional inquiries. Mild fall weather has been checking activity in heavyweight underwear. Fine counts also are quiet, while medium numbers also have little to show in the way of demand. Prices are reported around 13½ to 14c. basis 10s, with 26s at 19c., and 30s average quality at 21c., which seems to indicate a slightly weaker price attitude.

Combed yarns also show a quieter condition, and here also weak spots are apparent because of competition. Spinners seem willing to grasp any opportunity to secure business in a fair volume at a concession, such as 19c. for 10s single, or 27c. for 30s. Ply yarns have also shown results of competition with varied prices reported below the usual quotations. Improved spinning methods in southern mills are thought to play a part in lower prices, where it has been found possible to use a cheaper grade of cotton. Several manufacturers formerly using combed yarns are reported trying high grade carded yarns because of the advantage in price. Mercerized yarns are reported to have been moved in fair volume recently, with further sales under negotiation. Competition has resulted in prices somewhat below the quotations noted on page 66, especially in ply yarns.

◆Cotton Reacts; Demand Less Active

THE cotton market has shown reactionary tendencies during the week. One still hears many expressions of confidence in values as a long range proposition, but there is quite an obvious uncertainty as to the more immediate course of prices. Traders are apparently paying little attention to statistics of supply, but this is only because the extent of the amount available is pretty well established, and the fact there is so much cotton in the South to be disposed of sooner or later, has a tendency to restrict buying on advances and to promote selling whenever outside conditions appear somewhat less favorable.

During this week, reactions or irregularity in grain, stocks, and silver have all had a tendency to unsettle confidence in the immediate market, and in view of the large supply, the surprising thing, perhaps, is the fact that prices have not declined more severely. January contracts which sold up to 7.06 toward the end of October and reacted to 6.48 in advance of the Government crop report, it may be recalled, sold up to 6.91 right after the publication of the big supply figures but during this past week have reacted well below the 6½c. level.

Liquidation of December contracts in preparation for the possibility of notices toward the end of the month has probably helped to unsettle the market while the trade demand has appeared to be of smaller volume and more strictly confined to purchases on scale down orders. This has absorbed moderate southern selling and liquidation of old long accounts and has shown a tendency to increase as prices have declined. There has been little or no change in the general character of reports reaching here from the southern spot markets. The holding movement is referred to by some of the prominent spot interests as extraordinary. Farmers are so well equipped with food and feed stuffs and have so little to pay in the way of debts as credits were not easily obtained for raising the last crop, that they are

(continued on page 62)

◆Worsted Yarns Still Marking Time

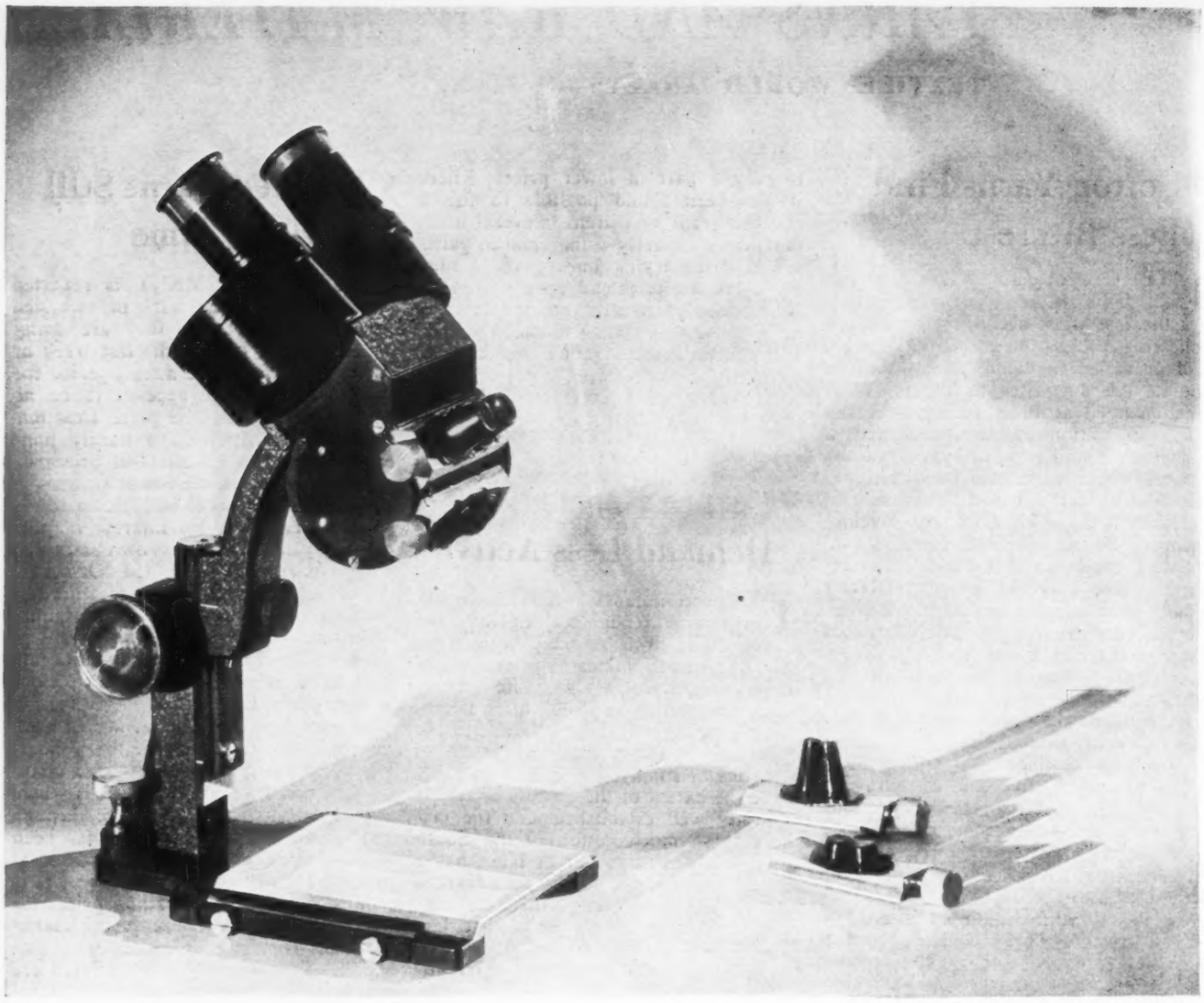
NO IMPROVEMENT is reported in active interest in worsted yarns. Dealers state they are doing little business, so that the last week or two appears to be the dullest period for some time. There appears to be no definite change in the price situation. Dealers state they have hardly done enough business to establish prices on any definite basis. Even if prices are shaded there seems to be little response, since buyers have no interest in purchasing yarns with their own sales and yarn requirements so limited. Of course the unseasonably warm fall weather has come in for a lot of blame for the failure of business to develop. The advent of the normal cold weather of the late fall, it is believed, will help goods to move in a larger volume.

One reason for this feeling of confidence is the realization of the wonderful values now available in woolen clothing at prevailing retail prices. It would appear that manufacturers have, through reductions in production costs, been able to place goods on the market at prices which should be attractive. It is pointed out that at prevailing prices for wools, there is little reason for manufacturers to manipulate their raw materials. Consequently goods offered are almost generally new, or "virgin" wool products. Competition between retailers and the various chain stores have also broughts prices down to attractive levels.

Another significant factor is the reported movement of medium wools in good volume recently. Much of this business is said to be due to a realization that wools are a good property at prevailing prices, rather than any influx of business which requires additional stocks of raw material. However, the very fact buyers were willing to take these wools in under such conditions, indicates a better frame of mind as to the future.

Knitting yarns continue quiet with little movement worth mentioning. Knitters have taken in their yarns pretty well, but have refrained from placing any additional business of any consequence. Prices mean little in the absence of any demand; 2-18s are still noted around 77½ to 80c., with occasional offerings of standard quality around 75c.; anything below that figure is regarded as likely to be sub-standard. Sampling for next spring's business has been done in a desultory fashion. Single 18s slub dyed in Bradford yarns are reported available around $1.15 with French spun nearer $1.22½ to $1.25 and on cones at $1.27½ to $1.30.

Business for weaving mills has not



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THIS easy-to-use microscope, as simple to operate as a pair of binoculars, enables the inexperienced operator to make accurate investigations. Like a super magnifying glass, the AKW with its wide field and long working distance brings into sharp relief much that the textile worker has heretofore only guessed at. The facts are laid bare . . . chance is eliminated.

Extremely useful when dissecting yarns, and for the identification of weaves and fibres without dissection of the fabric. With the stereoscopic effect obtained you can look down into the fabric . . . a feature which is indispensable to accurate investigation of lenos, pile, carpet, knitted and lace structures, and in the determination of yarn twist and diameter.

Five quickly interchangeable objectives give the AKW a range of magnifications from 7 to 87 diameters. One set is built permanently into the drum nosepiece, four others can be slipped quickly into place.

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YARNS AND RAW MATERIALS

TEXTILE WORLD ANALYST

developed in any great volume, and demand for yarns has shown little activity. Sampling is noted for the coming season. Medium and three-eights blood lines are apparently attracting most of the limited interest.

◆Improved Sentiment In Wool Circles

SENTIMENT in the raw wool circles has shown a change for the better during the week. The sag in prices noticeable at the beginning of the month has been checked and while buying is not in large volume, sellers have less difficulty in securing firm prices. The wool market seems to be coming under the influence of constructive factors. Prices of domestic wools cannot be described as fully firm, but there is an undertone of confidence in the market as a number of the larger houses refuse to meet low prices some buyers offer.

Mills are showing more interest in wools that were inactive during September and October. Inquiries from manufacturers and topmakers are more numerous covering more types of domestic grease wools. Buyers have raised their bids of a week ago with the result that the aggregate of the current sales is fairly large. Good 12 months Texas wools are now bringing 55 to 57c. clean basis.

Business on spring wool goods is still hanging fire. This situation may muddle along for the balance of the year although a realization of the somewhat precarious situation from the standpoint of the wholesale clothier may bring about a change overnight, particularly as it is now recognized that the wool market is quite unlikely to move any lower.

The wool trade is of the impression that mill demand between now and the appearance of new clip will be in sufficient volume to allow sellers to adjust market values to the real supply and demand. It is further believed that stronger wool prices will help rather than hinder manufacturing and also put some backbone into the goods market. The National Cooperative in an analysis of recent wool trade inventory states that 40,000,000 lb. was strictly wool for woolen purposes and that the balance of worsted wools might be divided as follows: Fine and fine medium, 102,000,000 lb.; half-blood, 22,750,000; three-eighths-blood, 7,250,000; quarter-blood, 9,000,000. Stocks of foreign clothing and combing were at the lowest point for years. This furnishes reason for believing that available stocks of good combing three-eights and quarter-bloods will be insufficient to meet mill needs.

◆Wool Substitutes On Low Basis

WOOL substitutes are moving slowly but the tone of the general market is a little better. Mill buyers of rags are acting cautiously and not purchasing beyond their immediate needs. They realize, however, that graded rag prices are on the bargain counter. Stocks of graded rags are small. There has been no incentive in recent weeks for graders to buy softs and grade them out with the only prospect before them of selling restricted quantities of the graded rags in demand on a cheap level and at the same time being forced to place the larger quantity of sorted material into stock.

Wool waste remains sluggish. The price basis is steady. All the bearish factors are known and there are some bullish factors in the offing, notably the probability that woolen manufacture may do better in the near future partly by reason of the fact that its raw materials are cheaper than even cheap virgin wool.

Noil dealers are becoming accustomed to the sluggish situation forced upon them by an almost complete indifference on the parts of many one-time consumers to offerings of noils, even though at bargain counter prices.

Values are running very closely together on the four standard grades of clean material and it is possible to buy anything from a fine to a choice high quarter-blood within the range of 28 to 32c. In the English market noils have risen with tops and show an increase over October lows of about 4c. in merinos and 1 to 2c. per pound in crossbreds.

◆Weavers Increase Rayon Purchases

INCREASED demand from the broadgoods mills has helped movement of rayon yarns during the last ten days. These weavers are interested mainly in 100s and 150s and orders are for spot delivery for the most part. The volume is considerably above that of late October, and producers are hoping, in view of the light buying last month, that the concluding weeks of 1931 may see some active movement. During recent years, December has been a slow month, chiefly because of hesitancy as to what January might bring in price changes.

Manufacturers show a disposition to forget the price issue and to regard the current levels as reasonably stable. Future contracts are few, but spot tone is good and the outlook for the balance of the quarter is rather encouraging. Knitters are producing steadily and are placing fair-sized orders for yarn. While Christmas will inevitably bring a lessening of business, the rayon firms see a good chance of steady buying for another few weeks.

◆Better Demand For Spun Silk

AN UPSWING in the call for spun silk yarns has brought encouragement to spinners and they regard the spring season prospects as more promising. Volume of yarn sales is well below normal but this was anticipated; broadsilk mills are beginning to cover for their spring requirements and the last ten days have seen more interest, both as regards inquiries and orders. The call is about evenly divided between singles and doubles. Some of the business is for January shipment.

Throwsters continue to rely on the hosiery trade for much of their sales. Broadsilk mills are slightly more interested than last week but orders are still very meager. The outlook for thrown yarns is uncertain. Prices hold steady and stocks in throwsters' hands are moderate.

◆Mills Re-Sell Silk Below Cost

RAW silk buying outlook is uncertain, and there are some disturbing elements such as the growing tendency among mills to re-sell silk stocks at low prices, which have a depressing effect. Consistent firmness in Japan has held levels steady but it is doubtful whether this will be maintained. There is little real buying interest in New York. Broadsilk weavers continue very hesitant and are placing negligible business. Numerous fabric manufacturers, including large houses have been disposing of their raw silk stocks at prices well below even current levels. Importers are bewildered by this development as the weavers would suffer considerable loss, if they tried to buy silk at their own selling prices. Slowness of movement in spring fabric lines seems to have instilled fear in the minds of the weavers; the wisdom of their re-selling policy is doubtful to say the least, and it seems scarcely credible that the re-selling practice will be continued.

Slackening of demand from hosiery mills, which had been moderately active for some weeks, put a further damper on the raw silk market. The one hope of silk importers is that continued firmness in Japan will finally encourage increased buying here.

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FABRIC MARKET REPORTS

TEXTILE WORLD ANALYST

◆Gray Cottons Are Further Depressed

AN IRREGULAR and uncertain market exists for most constructions of cotton gray goods. A considerable spurt of activity occurred late last week, but prices on some numbers sagged to new low levels and it is generally accepted in Worth Street that numerous contracts for goods to be delivered next year were entered into at figures which must show mills a loss of 3 to 5c. a pound if they are to base their costs on present replacement values. The lack of stability to prices has occasioned alarm in some circles and active efforts are afoot further to reduce the output of print cloth mills in order to avoid real demoralization.

The attitude of some cotton manufacturers toward prices does not seem to be based upon the actual current cotton market, but rather upon the expectation of new low levels for the raw material, perhaps after the turn of the year. Efforts by the Federal Farm Board and groups of bankers to hold large quantities of cotton off the market through the current season do not seem to be accepted as sound procedure in the minds of these manufacturers. There seems to be apprehension that the weight of unsold cotton, even though not actively pressed upon the market, will depress prices on the staple below those now current.

The prospects for distribution of cotton goods generally during the early part of 1932 appear to be bright, and the low price basis is likely to broaden consumer interest beyond what has been experienced in 1931. If manufacturers could be brought to stop their incessant price slashings, distribution would probably move much more smoothly and there might be a small chance for some mills to break even. As it is, market students believe that mills which are selling at rock bottom figures today are merely contracting for definite losses which will be hard to make up. The sacrifice may take business away from someone else but it probably does not increase the total volume of goods sold.

The new low price basis on print cloths has brought 64 x 60s down to 3½c. and 80-squares sold for forward delivery at 5c. A moderate amount of business was accomplished early in the week. Broadcloths were less active, with 37-in. 100 x 60s selling at 5½c. There is a moderate movement of sheetings, and the bag trade continues to show interest in part waste osnaburgs.

Buyers are exhibiting interest in various lines of finished cotton goods but actual business is still slow. It is hoped that many of the more favorable factors now on the business horizon will soon take stronger root and begin more definitely to show beneficial effects in cotton goods distribution.

◆Boucles Enjoy Active Movement

WHILE "National Wool Week" has obviously helped women's wear fabrics more than other lines, it has imbued the market generally with a more optimistic spirit. Spring worsteds pick up very slowly, their progress being retarded by the unseasonably warm weather, and overcoatings are practically deadlocked; however, the low stocks prevailing and the keen retail interest that has resulted from "Wool Week" promotion have made mill representatives hopeful of early improvement.

Certain mills enjoy a good movement of women's wear lines. Boucles are in good position; some houses are selling boucles at high pressure. The New York market does not seem to have felt any effect of the Lawrence, Mass., shutdown, though the strike represented a substantial curtailment which is expected to show itself in a better price tone, once demand improves. The main difficulty in worsteds at present is the sharp competition and price-cutting. Mill agents complain that prices have not been steady since the openings. Buyers are hesitant, as it is impossible just now to buy worsteds with any assurance that the same goods will not be selling at lower levels next week.

The year-end prospects are difficult to estimate. Some firms regard December as crucial, contending that no business of any size need be looked for after the turn of the year. This, however, is far from certain. The hand-to-mouth policy is so rigidly adhered to that a crisp healthy winter could conceivably carry the heavyweight wool goods season well into January. The main point to keep in mind is that this is an abnormal year; precedents do not count. With retail stocks so low, and consumers so inadequately equipped, a congested end-season demand is well within possibility.

◆Spring Broadsilks Accent Plain Shades

THE cutting-up trade is actively sampling such of the new spring broadsilks as have been shown. There is no rush to place business, as a number of important fabric houses are holding off on their spring openings, and the buyers prefer to wait. While current showings indicate that prints will be important in the new season, mill factors are far from confident that these lines will be the dominant range. Plain cantons, in a pleasing variety of spring shades including numerous new pastel tints, are being shown.

Numerous developments make the trade cautious as regard estimating the position of prints for spring. Curtailment of production plus the new policy adopted by some houses of restricting the initial printing of a design of minimum yardage, will tend to strengthen the market and also will cut down the quantities of prints available. Weavers got their fingers badly burned last spring when prints "broke" severely, and they are not anxious to repeat the experience. Cutters also suffered, and these firms are expected to look with sympathy on any really interesting new plains that may be shown. While no one expects prints to fall into the background, there is fair probability that plains will run them a good second.

▸Vote on New Bedford Wage Reduction Nov. 20

Acceptance or rejection of the 10% wage cut announced by mills affiliated with the New Bedford (Mass.) Cotton Manufacturers' Association, effective Dec. 7 was decided upon by the nine locals associated with the Textile Council Friday night, Nov. 20. The vote was determined by regular ballot between the hours of 7 and 9, following which the Textile Council will meet to determine the result of the vote.

▸Diplomas on Cotton Cloth

Among the latest and most interesting developments growing out of the use of cotton fabrics for stationery and other printed forms, is the introduction of school and college diplomas engrossed in cotton cloth. According to C. K. Everett, manager of the New Uses Section of the Cotton-Textile Institute, New York City, this new idea has met with favorable reaction in southern communities particularly where increasing sentiment is found for "all-cotton commencements."

▸Railways Cut Silk Freight Rate

Executives of the Transcontinental Railway Lines and the Eastern Trunk Lines have approved of a reduction in overland freight rates for raw silk, silk train service, from $9 per 100 lb. to $6 per 100 lb. and this will go into effect subject to approval of the Interstate Commerce Commission, it was announced Thursday by the Silk Association of America.

KNIT GOODS MARKETS

TEXTILE WORLD ANALYST

◆Spring Underwear Improves Slowly

BUYERS are gradually placing their initial orders on spring underwear and a fair quantity of business was written by mills this week. Volume is still backward but knitters are optimistic and look for a more or less steady pick-up until the turn of the year when orders should take a sharp jump. The retailers in the Atlantic States are the chief customers at present; considerable business in both one and two-piece lightweights have been placed by them.

Heavyweight underwear is in active call and indications point to continued movement into January with the likelihood that the January openings may have to be postponed. While ribbed underwear volume has been excellent in the last two months, the season's total is disappointing; mills estimate that the volume and profit both will be well below that of last year. The chief reason for the drop is that buyers concentrated their buying within a period of less than four months, when it normally is spread through six to eight months. Mills curtailed production at the beginning of the season, with the obvious result that now they lose business because of inability to fill orders.

The exceptionally warm fall weather has had an adverse effect on winter underwear movement, as has been the hesitancy of buyers due to the uncertain industrial outlook.

◆Christmas Hosiery Rush Commences

HOSIERY buyers have suddenly realized that Christmas is coming, and there is a pressure of demand on mills for quick deliveries. Orders picked up sharply during the last ten days; both jobbers and retailers covered actively, the call being chiefly for fancies though there was also a good movement of staples, particularly in women's full-fashioned. Women's mesh hosiery is an outstanding gift line, and buying is so spirited that the market looks for an early shortage. Mills are operating at capacity for the most part; even this output is not equal to the volume demand that knitters are expecting. Buyers deferred placing business for so long that they are now in the position of asking mills to sell more than the mills can make. The surplus hosiery stocks can be drawn on to meet this need when the call is for staples, but there is no inordinate supply of mesh hosiery available, and knitters already find it difficult to fill orders in some preferred lines.

Current mesh demand stresses lines retailing at $1.25 to $2.00, indicating a strong gift preference. In colors, all dark shades are favored; black, off-black, brown, vintage, and certain new gun-metal tones are the leaders.

Half-hose also moves actively, and price is somewhat steadier though far from as firm as usual for the holiday season. There is still a preference for low-price lines and the expectation of mills that Christmas would bring a strong trading-up trend has not been fulfilled, as yet. Half-hose stocks are less plentiful, which has helped market tone.

◆Spring Sweater Prices 10-12% Down

WINTERWEIGHT sweaters continue the leading sales group in knitted outerwear. Retailers and jobbers have slowed up somewhat on contracts, due to the mild weather conditions, but mills still have an abundance of business on hand, and they look for a sharp spurt of duplicate orders once the weather turns cold. Production is on a capacity basis, and prices hold firm.

Movement of current lightweight sweaters eased off this week, due to the openings of the 1932 spring lines. Some mills opened their new season sweaters before the designated date, which was last Monday, and these firms were reported to be quoting prices 10 to 12% below last season. The new styles show emphasis of the sleeveless models which is a wise choice considering the importance of that type during the season now closing. There is a wide range of colors, with reds more significant than in some years; mixed color effects also are outstanding, and white, which has been growing more popular during the last year is featured.

Early response to the spring sweaters left much to be desired. Buyers shopped around but the quantity of initial business placed was small. Buyers are disinclined to cover ahead on spring sweater lines, in view of the backward movement of winterweights, and there is little prospect of any big call for the new lines until current stocks sell better.

Swimsuits are backward; numerous large companies have placed "feeler" orders, but the trade as a whole is decidedly less confident than last fall. This is true both of the medium-sized mills and those of extended output. Bathing-suits are still early, however, and a good December could easily make up in volume for the poor start. Manufacturers themselves are a bit hesitant on the outlook, and are planning cautious production.

◆Raw Cotton Reports

(*Continued from page 57*)

in an unusually independent position. There is a feeling in some quarters here, however, that offerings may increase somewhat with the approach of the holidays and some local traders seem rather doubtful whether it is safe to assume that we have yet seen the lowest raw cotton prices for the present season.

Reports from the domestic goods market have been rather more discouraging than otherwise during the week. They have indicated a fairly good demand in some sections of the market, but no general buying movement, and there has been renewed talk of mill curtailment. Reports received here from Manchester have been generally encouraging ever since England went off the gold standard and the recent advance in silver stimulated demand in Manchester from India and China.

Less Favorable Weather

Weather conditions turned rather less favorable during the middle of the week, but it is felt that the crop is practically all made and that while wet weather might delay the movement or hurt the grade of some open cotton remaining in the fields, that it cannot have much effect on the final outturn. Sledding is being resorted to in the western belt, and there is such a relative scarcity of low grades this season that it is said sledded cotton is selling at rather better prices compared with low grades of hand-picked cotton than usual this season.

◆Comber and Strips Most Active Wastes

DEMAND for spinnable cotton wastes continues to hold up very well, peeler comber and strips being particularly active. Dealers handling wastes for export report much greater interest on the part of English and Continental mills. These consumers represent a large outlet for American cotton wastes, exports for last September, the latest month for which statistics are available, totaling over 1,000,000 lb., most of which went to the United Kingdom.

Average grades of peeler comber are quoted at 5¾ to 6c., with No. 1 choice comber held firmly at ¼c. more. Spinners are buying peeler strips at 5½c. and in one or two cases as high as 5¾c. has been paid where choice lots were involved. Stuffing waste demand has fallen off perceptibly as has demand for threads and linters.

TEXTILE FINANCIAL NEWS

TEXTILE WORLD ANALYST

◆ Asks Liquidation of Grinnell

WALTER H. LANGSHAW, president of the Dartmouth Mfg. Co., New Bedford, Mass., and holder of 500 shares of Grinnell Mfg. Corp. stock has addressed a letter to stockholders of the latter corporation asking for their proxies to facilitate the appointment of directors who will favor immediate liquidation of the Grinnell mill. The annual meeting of the corporation is set for Nov. 24. In his letter, Mr. Langshaw stated that, according to his calculations, the net balance of quick assets of the corporation showed a shrinkage of $745,000 during the period 1927-31 inclusive, $634,000 of which occurred during 1930 and 1931, and that on Sept. 30, 1931, there was an equity of $47.06 per share available to stockholders. The mill has been shut down for some months.

Waypoyset Par Value Changed

Wayposet Mfg. Co., Central Falls, R. I., has filed a notice of a change in capital from 106,200 shares of stock, no par value, to $91,500 and 14,700 shares of stock, no par value.

Financial Briefs

Stockholders of the Narragansett Mills, Fall River, Mass., have accepted the plan of directors involving reorganization of the corporation's capital structure, details of which were noted in these columns Oct. 31.

Directors of the Union Mills, Inc., Catskill, N. Y., declared a dividend in liquidation of $7 per share on the common stock, payable Nov. 5 to stock of record Nov. 2. This is the second liquidation payment, an initial disbursement of $10 per share having been paid last March.

Hillside Cotton Mills, La Grange, Ga., has reduced its quarterly dividend to $1.50 per share, payable Nov. 1 to stockholders of record Oct. 14. The previous quarterly rate was $3.

At a meeting of the stockholders of Wade Mfg. Co., Wadesboro, N. C., it was resolved to destroy the stock recently purchased by the company leaving the capital stock now outstanding $650,000. During the eight years the plant has been in operation the company has paid a total of 49% in dividends.

A certificate of reduction of capital stock and number of shares was filed recently by Adirondack Woolen Co., Little Falls, N. Y. The company incorporated on May 18, 1904, with stock of $150,000. This reduced to $25,000 with 250 shares of stock.

A net deficit for the year ended Dec. 31, 1930, of $9,438 as against a net profit of $230,896 for the previous year, is reported by the General Rayon Co., Ltd., of Canada. This company is understood to be a holding company for the Societa Generale Italiana della Viscosa, of Italy; it was incorporated under Canadian law two years ago.

Portland (Ore.) Woolen Mills, Inc., did not pay on Nov. 1 the maturity of $34,000 of the company's $413,000 outstanding first mortgage 6½% bonds. As a result a bondholders' committee has been formed, principal purpose of which is to secure a 51% deposit of bonds by Jan. 1, 1932, in order that a three-year extension may be granted the company on all its mortgage bond maturities. Bond interest will continue to be paid, also all other fixed charges.

Boston Stock Auctions

The following sales of textile shares were made at Wednesday's (Nov. 11) auctions:

Shares	Mill	Par	Price	Change
150	General Cotton Corp.	...	1¼	....
20	Pepperell	100	42½	+2
25	United Elastic	...	13–15	...
20	Farr Alpaca	100	27	—8½
215	Total			

▶ Textiles on N. Y. Exchanges

The following shows the movements of the leading textile stocks listed on the New York Stock Exchange and Curb for the week ended Nov. 17:

	High	Low	Last Sale	Net Ch'ge
Adams Millis	30	28	30	...
American Woolen	6¼	5⅞	6	—¼
American Woolen, pfd.	29¼	25	29	+1¼
*Assoc. Rayon, pfd	...	...	...	...
Belding-Heminway	5	5	5	+⅛
Cannon Mills	20¼	19⅝	19⅝	—⅛
Century Ribbon	7	5⅞	6⅞	+⅛
*Courtaulds, Ltd	7⅞	7⅛	7⅛	+⅛
Gotham Hosiery	8½	8	8⅛	...
Industrial Rayon	35½	30½	33½	—½
Kayser, Julius	11⅛	9½	10⅛	...
Kendall, pfd	40	39½	39½	—½
Mallinson	1¼	1⅛	1⅛	+⅛
*May Hosiery, pfd	20	20	20	...
*Mock Judson	4⅛	4⅛	4⅛	+⅛
Munsingwear	19	19	19	...
Real Silk Hosiery	4⅞	4⅝	4⅝	...
*Tubize	3⅛	3	3	—⅛

*Listed on Curb.

▶ New Bedford Mill Stocks

(Sanford & Kelley, New Bedford)

	Bid	Asked
Acushnet Mill	1	2
Associated Textile	..	8
Associated Textile, 6% pfd	..	10
Beacon Mfg., com	95	..
Beacon Mfg., pfd	76	79
Booth Mfg. Co., com	1	..
Booth Mfg. Co., pfd	14	..
City Mfg. Co	6	..
Dartmouth Mfg. Co., com	20	..
Dartmouth Mfg. Co., pfd	76	..
General Cotton Co	1	1½
Gosnold Mill, com	13	16
Gosnold Mill, pfd	41	43
Gosnold Mill Notes	84	..
Grinnell Mfg. Co	20	..
Hathaway Mfg. Co	33	35
Holmes Mfg. Co., pfd	..	10
Kilburn Mill	12	..
Nashawena Mills	10	12
Neild Mill	14	..
Nonquitt Mills	1	..
Pierce Mill	72½	..
Potomska Mills	30	32
Quissett Mills, com	27½	..
Soule Mill	45	47½
Taber Mill	4½	5½
Wamsutta Mills	5½	6

▶ Southern Mill Stocks

(R. S. Dickson & Co., Charlotte, N. C.)

	Bid	Asked
Acme Spinning Co	40	53
American Yarn & Processing Co	29	35
Chadwick-Hoskins Co. (Par $25)	4	8
Chadwick-Hoskins Co., 8%, pfd	74	82
Crescent Spinning Co	30	38
Durham Hosiery, 6%, pfd	14	23
Erwin Cotton Mills Co., 6%, pfd	80	90
Flint Mfg. Co	..	52
Flint Mfg. Co., 7%, pfd	..	90
Hanes, P. H. Knitting Co	3	6
Hanes, P. H. Knitting Co., 7%, pfd	73	89
Linford Mills	34	46
Perfection Spinning Co	36	50
Roanoke Mills, 1st pfd., 7½%	38	..
Rosemary Mfg. Co., pfd., 7½%	57	..
Stowe Spinning Co	32	50
Ware Shoals Mfg. Co	..	90
Ware Shoals Mfg. Co., 7%, pfd	83	91
Winget Yarn Mills Co	..	42
Wicasset Mills Co	100	120
(A. M. Law & Co., Spartanburg, S. C.)		
Avondale Mills, Ala	580	675
Bibb Mfg. Co	78	83
Clifton Mfg. Co	..	61
D. E. Converse Co	..	51
Dunean Mills	75	85
Dunean Mills, pfd	94	96
Gossett Mills	..	30
Hunter Mfg. & Com. Co., pfd	67	72
Judson Mills, A pfd	78	83
Judson Mills, B pfd	75	80
Monarch Mills	..	70
Newberry Cotton Mills	..	75
Orr Cotton Mills	..	35
Pacolet Mfg. Co	..	40
Piedmont Mfg. Co	50	55
Riverside & DanRiver Mills (Par $25)	6	8
Riverside & Dan River Mills (6%, pfd)	50	53
Southern Bleachery & Print Works, pfd.	..	40
Spartan Mills	..	95
Union-Buffalo Mills, 1st pfd	..	43
Victor-Monaghan Co	39	41

▶ Fall River Mill Stocks

(G. M. Haffards & Co., Fall River)

	Bid	Asked
Algonquin Printing Co	175	228
Barnard Mfg. Co	7	..
Berkshire (com.)	2	..
Berkshire (pfd.)	10	..
Bourne Mills	12	..
Border City Mfg. Co	4	5
Charlton Mills	..	48
Davol Mills	1	4
General Cotton	1	3
Luther Mfg. Co	..	70
Merchants Mill	..	..
Narragansett Mills	..	3
Pepperell Mfg.	40½	43
Pilgrim Mills	..	30
Richard Borden Mfg. Co	1	..
Sagamore Mfg. Co	..	50
Shove Mills	..	..
Stafford Mills	..	1
Stevens Mfg. Co. (pfd)	..	51

▶ New England Textile Stocks

Quotations at "Public Sale" are based on last sales at Boston Public Auctions and Boston Stock Exchange. Bid and Asked prices are latest quotations of dealers.

	Sale	Bid	Asked
Am. Mfg. Co., pfd	50	48	..
Amoskeag	5½	..	..
Arlington	23	18	21
Associated Textile	10	..	10
Bates	60	41	..
Berkshire Associates, com	12½	2	4
Berkshire Associates, pfd	40½	11	15
Bigelow-Sanford, com	25½	..	..
Boott Mills	120½	40	60
Edwards	80½	42	46
Esmond, pfd	98	95	99
Farr Alpaca	27	26	28
Hamilton Woolen	55	45	50
Hill	7	4	6
Indian Orchard	10	..	10
Ludlow	65	65	68
Merrimack, com	35	8	14
Nashua, com	7½	4	8
Nashua, pfd	29	20	25
Naumkeag	50	49	53
Newmarket	16½	7	11
Otis	45	40	44
Pacific	13	..	..
Pepperell	42½	41	44
Plymouth Cordage	56	52	55
York	8½	6	..

▸ Annual Meeting of the Home Market Club

The 44th annual meeting of the Home Market Club was held at its offices in Boston, on Wednesday, Nov. 18, at noon, for the purpose of electing officers and hearing the annual reports.

Hon. Sinclair Weeks, Mayor of Newton, president and treasurer of the Reed Barton Co., of Taunton, Mass., and president of the United-Carr Fastener Co., of Cambridge, Mass., was re-elected president of the club.

Among the vice-presidents who were re-elected are the following: Arthur H. Lowe, Fitchburg, Mass.; Frederick C. Fletcher, Boston, Mass.; Charles E. Riley, Newton, Mass.; Henry F. Lippitt, Providence, R. I.; Louis B. Goodall, Sanford, Me.; Horace A. Carter, Needham Heights, Mass.; Dr. Homer Gage, Worcester, Mass.; Harold C. Whitman, New York City; Edward L. Martin, Pawtucket, R. I.

The following were re-elected members of the Executive Committee: the president, secretary and treasurer, ex officio; E. Kent Swift, Whitin Machine Works, Whitinsville, Mass.; Frank B. Hopewell, L. C. Chase & Co., Boston, Mass.; Franklin W. Hobbs, president of the Arlington Mills, Lawrence, Mass.; Robert A. Leeson, Universal Winding Co., Boston, Mass.; Nathaniel F. Ayer, Cabot Mfg. Co., Brunswick, Me.

▸ Carders Attend First N.A.C.M. Forum

The first meeting of the Textile Forum of the National Association of Cotton Manufacturers was held in Boston, Nov. 12, with a representative attendance of overseers of carding from New England and New York State mills. Problems of picking, carding, drawing and roving were discussed and information exchanged on new developments in machinery and methods. For the first time textile machinery manufacturers were represented in order that they might contribute information on the latest improvements and innovations. A complete summary of the discussion will appear in a later issue of TEXTILE WORLD.

▸ Chance for Tariff Legislation

Just as business begins to get its head above the water it must prepare for another squall in the form of tariff legislation. A number of the Democratic leaders would like to find a way to sidestep the question at this particular time but the spokesmen for the party have belabored the "Grundy" tariff to an extent that they can do nothing else but propose a general revision of a measure the party has denounced so scathingly.

▸ Instruction in Silk and Rayon Fabrics

Free instruction in silk and rayon merchandising and manufacturing is again being given this winter at the New York Evening Textile High School under the Board of Education. This course is given on Monday and Wednesday evenings from 7.20 to 9.20 and repeated on Tuesday and Thursday evenings at the same time.

Those desiring to register should call in person at the Textile High School, 351 West 18th Street, New York, any school evening between 7.20 and 9.20.

▸ Urge Association to Carry On "Wool Week" Work

The organization of the United Wool Industries Association for the purpose of perpetuating active work along the lines of the National Wool Week campaign, was recommended at a meeting of the executive committee of the Philadelphia Wool & Textile Association, held Tuesday, Nov. 17. The meeting was held in conjunction with a luncheon at Dufour's Restaurant, with a guest speaker in Roger C. Tredwell, U. S. consul-general at Sydney, Australia.

Hope that permanent values other than the promotional benefits now being enjoyed might accrue to the wool industry from "National Wool Week" was also expressed this week by Col. F. H. Johnson, chairman of the National Wool Week Committee. He added that the results of the event, while surpassing expectations, indicate that "we have simply scratched the surface of our problem."

▸ Pacific Starts Spring Season with Style Show

The Pacific Mills started its spring 1932 presentation of cotton goods by an extensive mannikin parade at its New York offices last Tuesday. There was an attendance of about 400 representatives of retailers, stylists and garment makers while Miss Martha E. Dodson, sales promotion manager, described the fabrics and styles as the models appeared upon the platform.

For suits, separate jackets and separate skirts Pacific Ker-Splash, pique and linen were stressed as best style. For blouses these same fabrics plus dotted swiss were shown. For sports dresses pique, mesh, prints and a new fabric called "Sheertucks" were offered. A wide range of pajamas for beach, lounging, sports and country-wear were shown in many different fabrics. For models of all-day dresses and afternoon dresses, fine cambric, batiste, lawn, dotted swiss, etc., were stressed.

In commenting on style trends Miss Dodson said that plain colors would be important next spring as additions to the wardrobe and not as usurpers of the place held by prints. She expects 1932 to be the biggest suit season since the war with the probable return of the shirtwaist. She pointed out that the colors in virtually 100% of the Pacific line of plain goods matched the colors in Pacific prints. All the models shown were created in the Pacific Mills Experimental Workshop under the direction of Miss Dodson.

▸ J. Bruce McCullough to Manage Franklin Process Gray Yarns Dept.

On Jan. 1, 1932, J. Bruce McCullough, who has been associated with the cotton yarn trade for many years, will organize and manage the natural or gray yarns department of the Franklin Process and associated companies. He has been connected with Amoskeag Mfg. Co. for the last few years associated with George C. Busher, manager of Amoskeag's yarn department, New York.

Franklin Process Co.'s gray yarns department will furnish its customers with a complete yarn service.

▸ New Southern Distribution Policy for Bigelow-Sanford

H. V. Campbell, vice-president and director of sales of the Bigelow-Sanford Carpet Co., Inc., announced on Nov. 17 the plans of the company to establish showrooms and handle the distribution of their products to the retail floor-covering trade of the South from four distributing centers in Atlanta, Jacksonville, New Orleans and High Point.

▸ Dixie Yarn Co. Organized by C. J. and H. A. Boland

C. J. Boland and H. A. Boland have organized the Dixie Yarn Co. with headquarters in Burlington, N. C. This company will sell all kinds of yarns to the hosiery and weaving trades of North Carolina. The company's salesmen will cover that territory twice monthly. The organization already has established connections with several southern and eastern mills.

▸ Boston Wool Receipts

Receipts of domestic and foreign wools at Boston, also imports at Philadelphia and New York for the week ended Nov. 14, based upon data compiled by Dept. of Agriculture, follow:

	Week Ended Nov. 14	Total to Date 1931	Total to Date 1930
Domestic	2,304,000	246,320,000	238,056,000
Foreign	452,000	36,411,000	52,929,000
Total	2,756,000	282,731,000	290,985,000
IMPORTS AT PRINCIPAL PORTS			
Boston	452,000	36,411,000	52,929,000
Philadelphia	1,202,000	47,527,000	40,677,000
New York	286,000	47,353,000	39,081,000
Total	1,940,000	131,291,000	132,687,000

▸ October Cotton Consumption

Cotton consumption for October is reported by Bureau of Census as 462,025 bales against 443,284 in October 1930. For the three months ending October consumption was 1,115,793 bales against 1,354,574 respectively.

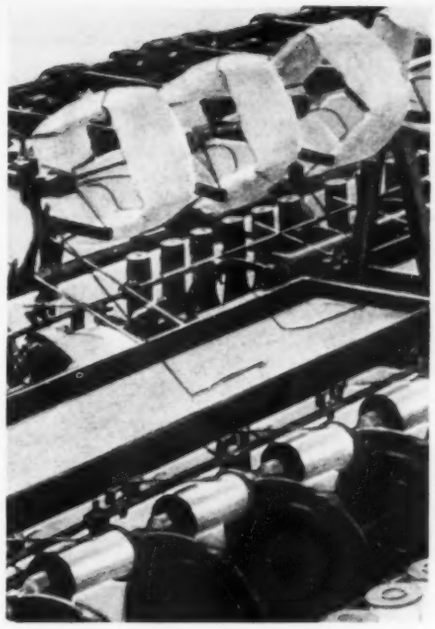
▸ Correction in "Varying Twill"

In the article "Attractive Weave and Color Effects Secured by Varying the Common Twill," by R. A. C. Scott, in last week's issue, Figs. 23 and 27 were transposed through error.

▸ Waldo Appointed Agent for N. V. Rayon Invention Co.

N. V. Rayon Invention Co., Breda, Holland, holders of the patent rights for the Breda rayon cake-washing process and Breda cheeselet swifts announces the appointment of Frank Waldo, 25 Ingram St., Forest Hills, L. I., as its agent in this country. It is reported that the N. V. Hollandsche Kunstzijde Industrie, Breda, is now producing rayon entirely by the cake-washing process and is selling 75% of its output in the form of cake packages (called cheeselets) and the remainder on cones wound directly from the cakes.

Among the advantages cited for this method of producing rayon is that it dispenses with reeling and sorting, thereby effecting considerable economies in manufacturing costs, and at the same time resulting in an improved quality of yarn. The cheeselets weigh approximately 125 grams and contain 18,000 meters of 60-denier rayon, 7,500 meters of 150-denier, etc. Freedom from knots is guaranteed for these lengths. A special swift which fits any winding machine equipped with skein-reeling attachments is employed for unwinding the cheeselets. This method of winding, which is shown in the accompanying illustration, is said to give an output per spindle at least 20% higher than is obtained by ordinary skein-winding methods, and to reduce labor costs at least 50%.



Breda rayon being wound directly from the "cheeselets"

▸ Industrial Safety Founded on Education, Says Vanderhooven

Constant vigilance and the multitude of educational activities promoted by the various safety committees and insurance companies keep the mind of the industrial executive continually focussed upon the safety aspect of his organization, according to C. Vanderhooven, secretary, American Enka Corp., Enka, N. C., who delivered an address on "Safety—A matter of Co-operation" at the second annual North Carolina Industrial Safety Conference, held in Charlotte, N. C., Nov. 5. These educational efforts, he pointed out, also hold the worker's mind attentive to precautionary measures that will avoid and, whenever possible, eliminate injuries and accidents in the plant.

The speaker elaborated upon the broader considerations involved in the successful application of safety measures, with particular emphasis on the human equation. However, he referred to the fact that cooperation on the part of employees does not come voluntarily, and stated that it is "first and above all the down-right and indisputable obligation of the management to instill in the mind of each and every member of the organization an unshakeable sense of his or her responsibility in respect to avoiding all possibilities of hazards."

He declared that education should be concerned with teaching the fundamental principle of cooperation, the respect for life, safety and comfort of our fellow-men, and to make the violation of these principles deeply despised by American youth. Such a broad understanding of cooperation would greatly simplify the problem of industrial safety.

▸ Plans for N. C. Meeting

Dr. Frank Porter Graham, president of the University of North Carolina, will deliver the principal address as the winter meeting of The Cotton Manufacturers Association of North Carolina, which will be held at The Carolina, Pinehurst, N. C., Dec. 4 and 5, according to an announcement by Hunter Marshall, Jr., secretary, this week. Dr. Graham's address will be the feature of the banquet Friday evening.

The executive committee of the association will meet Friday morning at 11 o'clock and after lunch, the annual golf tournament will be held under the direction of W. H. Willard, of Charlotte, N. C. K. P. Lewis, of Durham, N. C., president of the association, will act as toastmaster at the banquet Friday evening and preside over the regular business session Saturday morning.

▸ Philadelphia Clothing Makers Acquire Looms

Goodimate Co., men's clothing manufacturer, Philadelphia, has brought the 36-loom equipment of Integrity Mills, Philadelphia, and will remove it to the Goodimate plant. Production of exclusive designs in fabrics is said to be the advantage sought by this move. It is also reported that Middishade Co., men's clothing manufacturer, Philadelphia, has arranged for location of 20 looms in its own plant acquired from Beaver Worsted Mill, Frankford.

Business News

Terrell Adds Shuttle Truing Machine to Line

The Terrell Machine Co., Charlotte, N. C., has added to its line of textile specialties the Universal shuttle truing machine made by Staubli Bros. & Co., Horgen-Zurich, Switzerland. This machine is imported by Henry Tschudy, textile engineer, New Bedford, Mass., and by arrangement with Mr. Tschudy the Terrell Machine Co. has been appointed sales agent for Virginia, North and South Carolina, Georgia, Alabama, Tennessee, Mississippi and Louisiana.

U. S. Testing Co. Moves New York Laboratories to Hoboken

The United States Testing Co., Inc., announces that the New York laboratories, now located at 316 Hudson Street, will be established in new and improved quarters in their own building at 1415 Park Avenue, Hoboken, N. J., after Dec. 1.

The new laboratories will be equipped to make all types of tests and analyses. The testing company will place particular stress on the making of special tests, the carrying on of investigations and researches for its clients and the development of its consulting service. For the convenience of New York clients a small office will be maintained in the Flatiron Building, primarily as a receiving station for samples and mail, but with a technician in attendance.

Claude O. Streeter Severs Connection

Claude O. Streeter, mechanical engineer in the power transmission field, has severed his connection in New York City and returned to his home in Shrewsbury, Mass. Mr. Streeter was with Graton & Knight Co. for many years and was lately with the Schwartz Belting Co.

Changes in Duriron Representation

The Duriron Co., Inc., Dayton, Ohio, manufacturers of acid-resistant metals, has appointed H. P. Rodgers as representative for the Cleveland territory. Offices are located at 528 Leader Building.

Shawinigan Chemical Co., Ltd., Montreal, Canada, has been licensed by the Duriron Co., to produce Duriron and Duriron equipment (acid-resistant) for all of Canada and Newfoundland. They will make a complete line of pumps, valves, pipe and fittings, and special castings for acid handling service.

The Industrial Equipment Co. (G. G. Crewson and Arthur E. Smith), formerly representing the Duriron Co. in the Buffalo territory, has been dissolved. The Duriron Co. is now opening a direct sales office in Buffalo under the management of Guy A. Baker, who comes from the general office at Dayton.

New School Teaches Welded Building Design

The General Electric Co. has announced the opening at Schenectady of a school of welding design to teach engineers, architects, draftsmen, etc., both in and out of its employ, methods of designing welded buildings.

QUOTATIONS

at close of business, Nov. 18, 1931
Prices cover average qualities unless otherwise stated

Cotton Goods

	Nov. 18	Nov. 11	Nov. 19 1930
PRINT CLOTHS			
27 -in., 64x60, 7.60	2 5/8c.	2 5/8c.	4½–4¼c.
38½-in., 64x60, 5.35	3½–3¼c.	3⅜c.	5½–5¼c.
39 -in., 68x72, 4.75	3¾– 4 c.	4 c.	6 1/16–6¼c.
39 -in., 72x76, 4.25	4¼c.	4¼c.	7–7⅛c.
39 -in., 80x80, 4.00	5–5¼c.	5–5¼c.	7¼–8 c.
BROWN SHEETING			
36-in., 56x60, 4.00	4¼c.	4¼c.	6¼c.
36-in., 48x48, 3.00	4¾c.	4¾c.	7¼c.
37-in., 48x48, 4.00	4c.	4c.	5¾–6 c.
PAJAMA CHECKS			
36½-in., 72x80, 4.70	4¾–4¾c.	4¾–5c.	6¾c.
36 -in., 64x60, 5.75	4c.	4 c.	5¼c.
MISCELLANEOUS			
Drills, 37-in., 3 yd..	5c.	5 c.	7¼c.
Denims, 2.20	9¼c.	9¼c.	12½c.
Tickings, 8 oz.	13 c.	13 c.	16 c.
Standard prints	7 c.	7 c.	7½c.
Eastern staple gingham, 27-in.	7½c.	7½c.	8 c.

Cotton Waste

Peeler comber	5¾ – 6¼
Peeler strips	5¼ – 5¾
Sak. comber	4¾ – 5¼
Choice willowed fly	2¾ – 3¼
Choice willowed picker	2 – 3
Sak strips	6¼ – 7¼
Linters (mill run)	1¾ – 2¼
White spooler (single)	4¼ – 4¾

Cotton Yarn

CARDED (Average Quality)
Double Carded 2c.—4c. higcer according to quality

SINGLE SKEINS OR TUBES (Warp Twist)

4s to 8s	$0.14	22s	$0.17½
10s	– .14½	24s	– .18½
12s	– .15	26s	– .19½
16s	– .15½	30s	– .21
20s	—.16½	40s ex. qual.	– .30

TWO-PLY SKEINS AND TUBES

8s-2	$0.14½	26s-2	$0.19
10s-2	– .14½	30s-2	.20 – .20½
12s-2	– .15	36s-2	.25½– .26½
14s-2	– .15½	40s-2	– .28½
16s-2	– .16	40s-hi.brk.	.30 – .31
20s-2	– .17	50s-2	– .36
24s-2	– .18½	60s-2	– .39

SINGLE WARPS

10s	$0.14½	24s	$0.18
12s	– .15	26s	– .19
14s	– .15	30s	– .21½
16s	– .15½	40s.ex.qual.	– .30
20s	– .16½		

TWO-PLY WARPS

8s-2	$0.15	24s-2	$0.18½
10s-2	– .15½	26s-2	– .19½
12s-2	–	30s-2	.20½– .21
14s-2	.16 –	40s-2 ordin.	– .28½
16s-2	.16½–	50s-2	– .36
20s-2	.17 –	60s-2	– .39

8s-2 and 4-ply skeins and tubes; tinged, 13-13½; white, 14; waste, 12½

HOSIERY CONES (Frame Spun)

8s	$0.13½	22s	$0.17½
10s	14 –	24s	– .18½
12s	14½–	26s	.19 – .19½
14s	15 –	30s tying	.20 – .20½
16s	15½–	30s reg.	.21 – .21½
18s	16 –	30s ex.qual.	– .22½
20s	– .17	40s	– .27½

COMBED PEELER (Average Quality)

TWO-PLY—(Knitting Twist) Cones

20s-2	$0.25 – .26	60s-2	$0.40 – .43
30s-2	.28 – .30	70s-2	.52 – .54
36s-2	.32 – .33	80s-2	.63 – .65
40s-2	.33 – .34	90s-2	.85 – .90
50s-2	.37 – .38	100s-2	1.03 –1.05

WARPS, SKEINS AND CONES
TWO-PLY—(Warp Twist)

20s-2	$0.26	60s-2	$0.42
30s-2	– .31	70s-2	– .55
36s-2	– .34	80s-2	– .63
40s-2	– .35	90s-2	– .93
50s-2	– .38	100s-2	–1.03

SINGLES

12s	$0.20½	30s	$0.27 – .29
14s	– .21	38s	.32 – .33
16s	– .21½	40s	.33 – .34
18s	– .22	50s	– .37
20s	– .23	60s	.45 – .46
24s	.25 – .25½	70s	.55 – .56
28s	.27 – .28	80s	.65 – .66

MERCERIZED CONES—(Combed, Ungassed)

30s-2	$0.36½–0.38½	90s-2	$0.90
30s-2	.38 – .40	100s-2	1.15–1.25
36s-2	.40 – .42	120s-2	1.50–1.60
40s-2	.42 – .44	30s	.51– .52
45s-2	.42½– .44½	40s	– .56
50s-2	.45 – .47	50s	.61– .64
60s-2	.50 – .54	60s	.70– .73
70s-2	.64 – .66	70s	.80– .83
80s-2	.73 – .75	80s	.92– .96

Cotton Prices and Statistics

COTTON STATISTICAL DATA
(Fluctuations of Futures)

	Closed Nov. 11	For the Week High	For the Week Low	Closed Nov. 18	Net Ch'ge
November	6.49	6.25	6.18	6.18	—.31
December	6.56	6.63	6.20	6.21	—.35
January	6.63	6.72	6.31	6.32	—.31
February	6.71	....	....	6.40	—.31
March	6.80	6.88	6.48	6.49	—.31
April	6.88	....	....	6.57	—.31
May	6.98	7.07	6.65	6.67	—.31
June	7.06	6.84	6.76	6.76	—.30
July	7.14	7.23	6.85	6.86	—.28
August	7.22	....	....	6.96	—.26
September	7.30	....	....	7.05	—.25
October	7.40	7.47	7.12	7.14	—.26

SPOT FLUCTUATIONS FOR WEEK
(Middling)

	New York	New Orleans	Liverpool
Thursday, Nov. 12	6.60	6.52	5.06
Friday, Nov. 13	6.55	6.43	5.06
Saturday, Nov. 14	6.45	6.30	5.02
Monday, Nov. 16	6.40	6.30	4.88
Tuesday, Nov. 17	6.40	6.30	4.89
Wednesday, Nov. 18	6.35	6.19	4.98

FOREIGN COTTONS

Egyptian Cotton

Alexandria Exchange, Nov. 17		Change
Nov. Sak	12.88	+0.28
Dec. uppers	9.30	—0.35

Nov.-Dec. Shipment c. i. f. Boston
(Tariff not included)

Fully good fair Sak	14.00
Fully good fair to good Uppers	9.75

(By Anderson, Clayton & Co.)

Foreign cottons	F. O. B. New York, Cents
Peruvian Tanguis Strict Middling	17
Peruvian Pima No. 1	16½
Peruvian Moderate Rough	11
Peruvian Full Rough	17*
China Tientsin No. 1	9½
India Rough	7 to 9
India Smooth	6½ to 8

(By Bruns-Nordeman Co.)

MOVEMENT INTO SIGHT

	This Year	Last Year	Year Before Last
Week	768,000	601,000	615,000
Season	7,029,000	7,847,000	8,305,000

WORLD VISIBLE SUPPLY

	Today	One Year Ago
Interior towns and ports of U.S.*	†6,634,000	5,590,000
Afloat to and at ports of Europe.	1,293,000	1,664,000
Afloat to and at ports of Orient..	636,000	331,000
Total	8,563,000	7,585,000
	Increase	Increase
Change during week	†353,000	299,000

*Includes afloat to New York.
†13,000 Burned (Galveston).

FORWARDINGS TO MILLS OF WORLD

	This Year Week	This Year Season	Last Year Week	Last Year Season
No. States U.S.	27,000	240,000	27,000	220,000
So. States U.S.	188,000	1,503,000	118,000	1,433,000
Total U.S.	215,000	1,743,000	145,000	1,653,000
Great Britain	29,000	303,000	24,000	263,000
Continent	71,000	851,000	91,000	1,043,000
Orient	82,000	685,000	36,000	268,000
Canada and other America	5,000	51,000	6,000	72,000
Total foreign countries	187,000	1,890,000	157,000	1,646,000
World total	402,000	3,633,000	302,000	3,299,000

EXPORTS FROM UNITED STATES

Total	218,000	2,188,000	200,000	2,667,000

AVERAGE PRICE NOV.-DEC. SHIPMENT HARD WESTERN COTTON
F.o.b. New England

	Middling	St. Middling
1 1/16-in	8½–9c.	9½– 9½c.
1⅛-in	9½–10c.	10 –10½c.
1 3/16-in	10½–11c.	11½–11½c.
1¼-in	14 –15½c.	15 –16½c.

Basis on New York, December, 6.29.

SPOT FLUCTUATIONS AND STOCKS

Markets	Nov. 11	Nov 18	Sales	Stocks This Week	Stocks Last Year
Galveston	Holiday	6.15	5,050	930,398	650,783
New Orleans	Hol'dy	6.19	20,908	734,857	682,025
Mobile	Holiday	5.80	1,025	244,914	161,937
Savannah	6.31	6.01	2,606	357,679	288,215
Norfolk	6.56	6.25	429	67,938	90,907
New York	6.65	6.35	4,865	226,873	230,409
Augusta	6.38	6.00	1,114	138,554	143,650
Memphis	5.80	5.55	114,563	483,062	372,955
St. Louis	Holiday	5.45	....	....	4,460
Houston	Holiday	6.05	38,669	1,627,642	1,458,610
Dallas	Holiday	5.70	73,203	48,614	45,513

DIFFERENCES ON AND OFF MIDDLING WHITE GRADES

	Dallas	Memphis	Montgomery	Augusta	Average
M.F	0.65†	1.00†	0.75†	0.75†	0.75†
S.G.M	.50†	.75†	.65†	.63†	.61†
G.M	.40†	.50†	.55†	.44†	.44†
S.M	.25†	.20†	.25†	.25†	.26†
S.L.M	.40*	.40*	.40*	.38*	.39*
L.M	.90*	.90*	.90*	.88*	.87*
S.G.O.**	1.40*	1.10*	1.40*	1.38*	1.28*
G.O	1.90*	1.20*	1.90*	1.88*	1.70
YELLOW TINGED					
G.M.*	0.30*	0.25*	0.40*	0.50*	0.39*
S.M	.55*	.40*	.65*	.75*	.62*
M.**	.90*	.50*	.90*	.88*	.85*
S.L.M	1.40*	.90*	1.40*	1.38*	1.27*
L.M	1.90*	1.40*	1.90*	1.88*	1.73*
YELLOW STAINED					
G.M	0.90*	0.60*	0.90*	0.90*	0.86
S.M.**	1.15*	1.10*	1.15*	1.25*	1.18
M.**	1.90*	1.35*	1.75*	1.90*	1.71
BLUE STAINED					
G.M.**	0.90*	0.35*	0.90*	0.90*	0.84*
S.M.**	1.40*	.85*	1.40*	1.40*	1.26*
M.**	1.90*	1.10*	1.90*	1.90*	1.70*

**Grades not deliverable on contract.
*Off Middling.

Wool

OHIO, PENNSYLVANIA AND WEST VIRGINIA (IN GREASE)

Fine delne.	$0.24 –$0.25	¾ blood.....	$0.23 –0.24
Fine clthg..	.20 – .21	¼ blood.....	.21 – .21½
½ blood....	.23 – .24		

TEXAS AND CALIFORNIA (CLEAN BASIS)

Texas, 12 months	$0.55 –0.58
California, Northern	.48 – .50

PULLED—EASTERN (CLEAN BASIS)

A.A.....	$0.58 –$0.60	B-Super....	$0.43 –0.45
A-Super...	.48 – .50	C-Super....	.38 – .40

MONTANA, IDAHO AND WYOMING (CLEAN BASIS)

Staple fine	$0.58 –0.60
Staple ¾ bld.	.53 – .55
Fine and fine medium	.53 – .55
¾blood	.47 – .49
½blood	.40 – .42

MOHAIR—DOMESTIC

Best carding	$0.23 –0.25
Best combing	.31 – .33

MOHAIR FOREIGN (IN BOND)

Turkey fair, average	$0.17 –0.21
Cape firsts	.18 – .21

FOREIGN CLOTHING AND COMBING (CLEAN BASIS IN BOND)

Australia:	
70s	$0.45 –0.47
64s	.38 – .40
58s-60s	.33 – .35
(IN GREASE)	
Montevideo:	
58s-60s	$0.16 –0.17
56s	.15 – .16
50s	.14 – .15
Buenos Aires:	
4s, 40-44s	$0.11 –0.12
5s, 36-40s	.11 – .12

FOREIGN CARPET (GREASE BASIS IN BOND)

Aleppo washed	$0.23 –0.25
China: Combing No. 1	.13 – .14
China Filling Fleece	.12 – .14
Szechuen ass't	.12 – .14
Cordova	.14 – .15
Scotch black face	.15 – .17
East India: Kandahar	.17 – .19
Vican'r	.23 – .25
Joria	.23 – .24

Worsted Yarns

ENGLISH SYSTEM WEAVING

2-20s 36s	$0.75 –0.77½
2-24s 40s	– .80
2-26s 44s	.82½– .85
2-28s 46s	– .87½
2-30s 48s	.92½– .91
2-32s 50s	.97½–1.00
2-30s 64s fancy mixes	1.35 –1.37½
(Single yarns 5c. less than above)	
2-36s 58s	$1.10 –1.12½
2-40s, 60s	–1.20
2-40s, 64s	1.27½–1.32½
2-50s, 66s	1.40 –1.45
2-60s, 70s	1.82½–1.85

ENGLISH SYSTEM KNITTING

2-20s, 44s in oil	$0.75 –0.77½
2-20s, 48s in oil	.75 – .77½
2-20s, 50s in oil	.77½– .80
2-20s, 56s in oil	.92½– .95
2-20s, 60s in oil	–1.05
2-20s, 64s in oil	1.12½–1.15
1-18s, 48s dyed	.90 – .92½
1-18s, 50s dyed	.92½– .95
(Oil yarns 17½c. less)	

FRENCH SYSTEM

1-20s, 58s	$1.00 –1.05
1-20s, 60s	1.05 –1.07½
1-18s, 64s, dyed	1.27½–1.30
1-26s, 64s	1.07½–1.10
1-30s, 66s, Warp	1.20 –1.22½
1-30s, 64s, Warp	1.20 –1.22½
2-30s, 64s, Fancy mixes	1.40 –1.42½
2-40s, 64s, Zephyrs	1.32½–1.35
1-50s, 66s	1.47½–1.50
2-50s, 66s	1.50 –1.55
1-60s, 70s	1.82½–1.85
2-60s, 70s	1.90 –1.95

FRENCH SPUN MERINO WHITE

1-30s, 50-50-58s on cops	$0.95 –1.00
1-40s, 50-50-60s on cops	1.10 –1.15
1-40s, 50-50-64s on cops	1.12½–1.15
1-40s, 50-50-64s Australian cops	1.20 –1.25

Underwear mixes, 3 to 5c., Solid color, 35c. additional.

New York Top Futures

	Closed Nov. 11	For Week High	For Week Low	Closed Nov. 17	Net Ch'ge
November	69.50	69.50	68.00	68.00	—1.50
December	69.50	69.50	68.10	68.10	—1.40
January	69.50	69.50	68.00	68.00	—1.50
February	69.50	69.50	68.00	68.00	—1.50
March	69.50	69.50	68.00	68.00	—1.50
April	69.00	69.00	68.00	68.00	—1.00
May	69.00	69.20	68.00	68.00	—1.00
June	69.00	69.00	68.00	68.00	—1.00
July	69.00	69.00	68.00	68.00	—1.00
August	68.50	68.50	68.10	68.10	—0.40
September	69.50	69.50	68.10	68.10	—1.40
October	69.50	69.50	68.10	68.10	—1.40

Tops and Noils

TOPS—BOSTON

Fine (64-66?s)	$0.80 –0.83
Half-blood (60-62s)	.73 – .76
High ¾ blood (58s)	.67 – .69
Aver. ¾ blood (56s)	.61 – .64
Low ¾ blood	.58 – .60
High ½ blood (50s)	.53 – .55
46s S. A. and N. Z.	.61 – .63
44s S. A. and N. Z.	.56 – .58
40s S. A. and N. Z.	.50 – .52

TOPS—BRADFORD, ENG. (NOV. 14)

Fine (70s)	28 d	¾ bld. (56s)	19 d
Fine (64s)	26 d	½ bld. (50s)	15 d
½ bld. (60s)	24½d	Cross-bred (46s)	11½d

NOILS—BOSTON

Fine	$0.30–$0.33	High ¾ bld.	$0.26 –$0.27
Half-bld	.31 – .32	Low noils	.21 – .23
Aver. ¾ bld	.26 – .28	Medium colored	.22 – .24
Fine colored	.30 – .31		

Wool Substitutes

WOOL WASTE

Lap, fine white	$0.55 – .58
Lap, fine colored	.40 – .43
Hard ends, fine white	.41 – .43
Hard ends, ¼ blood white	.30 – .32
Hard ends, fine colored	.18 – .20
Hard ends, medium colored	.13 – .15
Card, fine white	.21 – .23
Burr, fine carbonized	.23 – .25

OLD WOOLEN RAGS (GRADED FOR MFRS.)

Merinos, coarse light	$0.05 –0.05½
Merinos, fine dark	.03½– .04
Merinos, fine light	.10 – .11
Serges, blue	.05½– .06
Serges, black	.05½– .06
Serges, red	.08 – .09
Knit, white	.19 – .20
Knit, red	.10 – .11
Knit, light hoods	.10½– .11
Worsted, light	.05 – .05
Worsted, blue	.05½– .06
Worsted, black	.06 – .06½

Silk Yarns

THROWN SILK (60 day basis)

	Nominal
Japan organzine, 2 thd. spec. gd. XX sk. 85%	$3.70
Japan organzine 2 thd. grand sk. 83%	3.50
Japan organzine, 2 thd. sp. crack. sk. 81%	3.40
Japan crepe, 3 thd. gd. XX bob. 83%	3.50
Japan crepe, 3 thd. sp. crack. bob. 81%	3.40
Japan grenadine, 4 thd. sp. grand singles, 87%	4.70
Japan grenadine, 3 thd. 90%	5.50
Canton crepe, 3 and 4 thd. 14/16 on bobbins	2.65
Hosiery tram, 3 thd. Japan 90%	4.35
Hosiery tram, 5 thd. Japan, 85%	3.40
Hosiery tram, crack XX 78%	3.10

SPUN SILK YARNS (Terms: net 30)

40/2	$3.10	60/2	$3.45
54/2	3.30	62/1	2.35

Raw Silk

(60 Day Terms. Spot Goods)

	13/15 White	20/22 White	20/22 Yellow
Super Grand, 87%	$3.00	$2.45	$2.45
Special Grand, 85%	2.75	2.40	2.40
Grand XX, 83%	2.60	2.35	2.35
Special Crack, 81%	2.50	2.30	2.30
Crack XX, 78%	2.40	2.25	2.20
Extra Extra, 73%	2.35	....	....
Best Extra, 68%	2.30	....	....

Canton filature, new style, 14/16	$1.95
Canton filature, new style, 20/22	1.85
Tussah filature, 8 cocoon	1.10

NATIONAL RAW SILK EXCHANGE

	Close Nov. 10	For the Week High	For the Week Low	Close Nov. 17	Net Ch'ge
November	2.27	2.27	2.23	2.25	—.02
December	2.27	2.29	2.23	2.25	—.02
January	2.28	2.31	2.25	2.26	—.02
February	2.28	2.31	2.25	2.26	—.02
March	2.28	2.32	2.25	2.26	—.02
April	2.28	2.31	2.25	2.26	—.02
May	2.28	2.31	2.25	2.26	—.02
June	2.27	2.31	2.25	2.26	—.01

Total number of bales, 4,510. Total approximate value, $1,439,592. Trading unit crack XX 13/15 white 78%.

Domestic Rayon

VISCOSE PROCESS

Denier	Filament	First Qual.	Second Qual.
30	8	$2.25	....
50	12–18	1.35	$1.25
75	18–30	1.20	1.10
100	18–40	1.00	.90
125	36–50	.90	.80
150	30	.72	.70
150	24–44	.75	.72
150	60	.85	.82
150	75–90	.85	.82
170	24–27	.75	.72
170	60	.85	.82
200	30–42	.75	.72
300	42–62	.63	.60
450	42–72	.63	.60
600	72–96	.63	.60
900	100–144	.63	.60

NITRO-CELLULOSE PROCESS

Denier	First Qual.	Second Qual.	Denier	First Qual.	Second Qual.
75	$1.35	$1.25	150	$0.75	$0.72
100	1.05	.95	175	.75	.72
125	.95	85			

CUPRAMMONIUM PROCESS

Denier	Filament	Price	Denier	Filament	Price
15	24	$3.10	75	60	$1.30
25	24	2.85	80	60	1.30
30	24	2.60	100	75	1.10
40	30	1.70	120	90	1.00
52	30	1.50	150	112	.90
65	45	1.40	180	135	.87

ACETATE PROCESS

Denier	Price	Denier	Price
45	$1.60	125	$1.10
60	1.50	150	1.00
75	1.40	300	1.00
100	1.30		

Rayon Waste

Open bleached waste	$0.13–$0.14
Open unbleached waste	.10½
Bleached thread waste (mfs.)	.09
Bleached thread waste (misc.)	.06– .07
Colored thread waste	.03– .04
Colored clips	.03– .04

CONVERTED RAYON WASTE

Bleached tops	$0.30–0.32½
Unbleached tops	.27– .28
Bleached noils	.11
Unbleached noils	.09½
Bleached garnetts	.12
Unbleached garnetts	.13
Colored garnetts	.10– .11

Silk Waste

Kibizzo Kakai Grand XX	$0.50
Kibizzo Kakai Triple Extra	.44
Frison Grand Double	.49
Pierced Cocoons	.50

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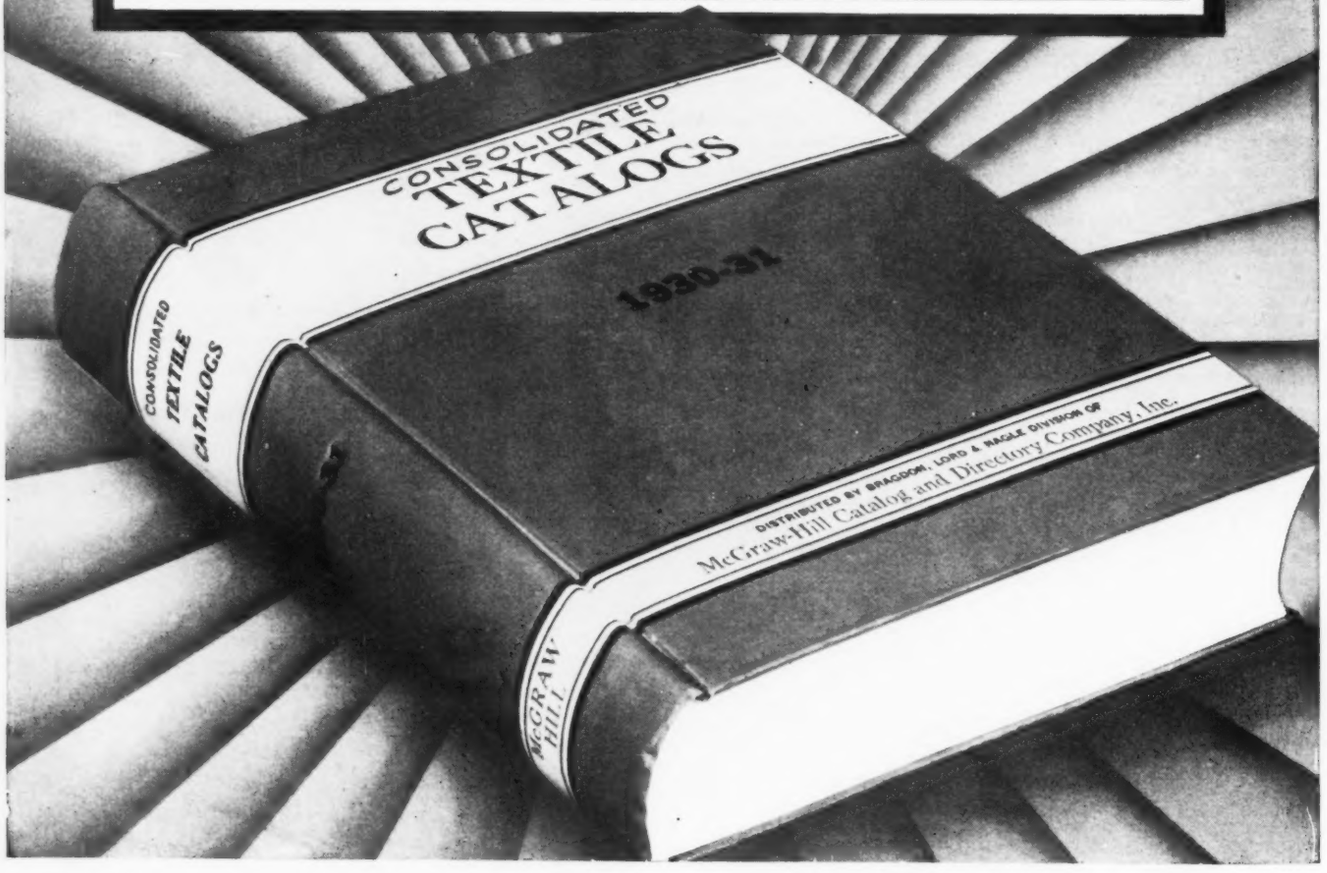
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